

COMPUTER PRACTICALS

LAB RECORD

BY

Name of the Student:_____

HALL-TICKET NO:

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AL-QURMOSHI

Institute Of Business Management

(Affiliated to OSMANIA UNIVERSITY, HYDERABAD - 500007)



Al-Qurmoshi Institute of Business Management

(Approved by AICTE, Affiliated to Osmania University) #18-11-26/7, Jamal Banda, Barkas, Hyderabad -05

CERTIFICATE

This	is		to		cer	tify		that
Mr./Ms							_ t	bearing
HALL-TICH	KET NO:	<u>1401</u>	-24-672		stu	ıdying	5	
MBA I-Sei	mester for	r the aca	ademic	year	r 20)24-2:	5 ha	s done
Computer	Practica	ls-Lab	work	as	a	part	of	MBA
curriculum	•							

Signature of the Internal Examiner

Signature of the External examiner

Principal

MASTER OF BUSINESS ADMINISTRATION (MBA) SYLLABUS

SEMESTER-I PAPER CODE – MB 106 Course: ITAM COMPUTER PRACTICAL

Unit – I: MICROSOFT EXCEL:

Microsoft Excel: Introduction to Excel, Introduction to data, Cell address, Cell reference; Excel Data Types; Introduction to formatting, number, text and date formatting; Concept of worksheet and workbook; Understanding formulas, Operators in Excel; Understanding Common Excel Functions such as sum, average, min, max, date, transpose, In, And, Or, Square Root, Power, Upper, Lower; Introduction to charts and different types of charts; Concept of print area, margins, header, footer and other page setup options.

Advance Excel: Creating Pivot tables, Macros - Relative & Absolute Macros.

Unit – II: MICROSOFT ACCESS:

Creating a database and tables by different methods - Data types - Inserting and Modification of Data - Sorting, Filtering and Displaying data; Creating and querying forms; Creating & Printing Reports and labels.

Unit – III: DBMS:

Macros – Functions of a DBMS, Transfer of data between Excel & Access; SQL Queries in Access.

Suggested Books

- 1. David Whigham, "Business Data Analysis Using Excel", Oxford University Press, Indian Edition.
- 2. Paul Cornell, "Accessing & Analyzing DATA with MS-EXCEL".
- 3. R & D,"IT Tools and Applications", Macmillan India Ltd.
- 4. Sanjay Saxena,"A First Course in Computers Based on Windows Office XP", Second Edition Vikas Publishing House.
- 5. P.Sudharsan & J.Jeyaalan, "Computers Systems & Applications", Jaico Student Edition Jaico Publishing House.
- 6. D.P.Apte, "Statistical Tools for Managers- Using MS Excel", Excel Books

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Microsoft **Excel**

1. Create the following worksheet in Excel.

RNO	NAME	COMPUTER	MATHS	SCIENCE	TOTAL
531	Mike	57	67	86	
532	Jones	43	78	89	
533	Chris	23	68	57	
534	Shin	56	89	78	
535	York	54	78	67	

- (a) Fill the TOTAL column.
- (b) Filter the candidate whose ROLLNO > 532
- (c) Filter the candidate whose MATHS > 70.
- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through G3. Highlight and make them in **Bold** with center alignment.
- 3. Fill the table with given data for name, computer, maths and science marks.

	Α	В	C	D	E	F	G	
1								T
2	90							
3		RNO	NAME	COMPUTER	MATHS	SCIENCE	TOTAL	1
4		531	Mike	57	67	86		
5		532	Jones	43	78	89		
6		533	Chris	23	68	57		
7		534	Shin	56	89	78		
8		535	York	54	78	67		

To Fill the TOTAL column:

4. Select cell G3, click on function button $\frac{1}{2}$. Insert function dialog box appears.

Insert Function		? 🛛
Search for a function:		
Type a brief descripti click Go	on of what you want to do and then	<u>G</u> o
Or select a <u>c</u> ategory:	Most Recently Used 🛛 🗸	
Select a function:		
SUM AVERAGE IF HYPERLINK COUNT MAX SIN		
SUM(number1,nun Adds all the numbers i	nber2,) n a range of cells.	
Help on this function	ОК	Cancel

Sum function is already selected, click on OK button.

5. Function Arguments dialog box appears:

Function Argumen	its	
SUM Number1 Number2	4:F4	1 57,67,86
Adds all the numbers in	n a range of cells.	= 210
Number1: nu are	mber1,number2, are e ignored in cells, includ	1 to 30 numbers to sum. Logical values and text ed if typed as arguments.
Formula result =	210	
Mala an this formation		

- 6. Select the range D4:F4 in Number1 textbox and click on OK button. Now formula bar will contain a new formula in the G4 cell =SUM (D4:F4)
- 7. Now click on \checkmark button to get the sum.

	G4	l.	+	f =SUM(D	4:F4)			
12	A	В	С	D	E	F	G	
1								
2							_	
3		RNO	NAME	COMPUTER	MATHS	SCIENCE	TOTAL	
4		531	Mike	57	67	86	210	
5		532	Jones	43	78	89		Ŧ
6		533	Chris	23	68	57		
7		534	Shin	56	89	78		
8		535	York	54	78	67		

8. Select the G4 cell. Take the cursor to the bottom-right corner to get a plus symbol. Hold it and drag down to autofill the rest of the cells in the column.

	A	В	С	D	E	F	G
1	2				9		l l
2							
3	-	RNO	NAME	COMPUTER	MATHS	SCIENCE	TOTAL
4		531	Mike	57	67	86	210
5		532	Jones	43	78	89	210
6		533	Chris	23	68	57	148
7		534	Shin	56	89	78	223
8		535	York	54	78	67	199

To filter the candidates whose ROLLNO > 532

9. Select the complete table. Go to Data menu-> Filter-> AutoFilter. After applying AutoFilter to the table, it looks like this:

	A	B	C	D	E	F	G
1							
2							
3		RNO 🔽	NAME 🗲	COMPUTER 🔽	MATHS 🗲	SCIENCE 🔽	TOTAL 🔽
4		531	Mike	57	67	86	210
5		532	Jones	43	78	89	210
6		533	Chris	23	68	57	148
7		534	Shin	56	89	78	223
8		535	York	54	78	67	199
9		1 1					N 82

10. Select the drop-down menu from RNO column and click (Custom...)

-	K9	•		fx -				
	A	В		С	D	E	F	G
1	6			~~~~				
2								
3		RNO		AME 🗲	COMPUTER 🔽	MATHS 🗲	SCIENCE 🔽	TOTAL 🔽
4	Sort Asce	ending	N	Aike	57	67	86	210
5	Sort Dest	enaing]	ones	43	78	89	210
6	(All)	A.	C	Chris	23	68	57	148
7	(Custom.	.)	S	hin	56	89	78	223
8	531		Y	′ork	54	78	67	199
9	533							
10	534							
11	535		_					

Custom AutoFilter dialog box appears.

Custom AutoFilter		N 100 100 100 100 100 100 100 100 100 10
Show rows where: RNO		
is greater than	~	532
	~	
Use ? to represent any single characte Use * to represent any series of chara	er acters	
		OK Cancel

- 11. In RNO select **is greater than** from left box and **532** from right box. Click on OK button.
- 12. The following output is generated that show rows where RNO is greater than 532.

	A	B	С	D	E	F	G
1							
2							
3		RNO 🔽	NAME 🗲	COMPUTER 🔽	MATHS 🗲	SCIENCE 🔽	TOTAL 🔫
6		533	Chris	23	68	57	148
7		534	Shin	56	89	78	223
8		535	York	54	78	67	199
9		14 A)

To filter the candidate whose MATHS > 70

- 13. Now remove filters by deselecting Data->Filter->AutoFilter.
- 14. Again select the complete table. Go to Data->Filter->AutoFilter.
- 15. In the similar manner Filter the rows where Maths is greater than 70

	A	B C D		D	E	F	G	
1								
2								
3		RNO 🔫	NAME 🗲	COMPUTER 🗲	MATHS 🗲	SCIENCE 🔽	TOTAL 👻	
5		532	Jones	43	78	89	210	
7		534	Shin	56	89	78	223	
8		535	York	54	78	67	199	
9				20	3	6		

Roll No	Name	ME	IT	HRM
1014	Joe	86	95	88
1015	Clark	45	37	68
1012	Nice	75	87	57
1011	Green	65	74	85
1013	Nick	78	67	46

2. The following are the marks obtained by the students of MBA in three Subjects:

- a) Sort the data by roll no
- b) Using Conditional Formatting list out students who scored More than 65 in IT
- c) Using Conditional Formatting list out students who scored Between 60 and 80 in HRM.
- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through F3. Highlight and make them in **Bold** with center alignment.
- 3. Fill the table with given data for name, ME, IT and HRM.

To Sort data by Roll No

4. Select the entire table. Go to Data->Sort... A new Sort dialog box appears. Roll No in Ascending order is already selected.

	A	В	C	D	E	F	
1							
2							
3		Roll No	Name	ME	IT	HRM	
4		1014	Joe	86	95	88	
5		1015	Clark	45	37	68	
6	1	1012	Nice	75	87	57	
7		1011	Green	65	74	85	
8		1013	Nick	78	67	46	

Sort	? 🛛
Sort by	
Roll No	Scending
(O Descending
Then by	
	Ascending
	O Descending
Then by	
	Ascending
-	O Descending
My data range has	
• Header <u>r</u> ow	◯ No header ro <u>w</u>
Options	OK Cancel

5. Click OK to get the data sorted in Ascending order of Roll No.

	Α	В	C	D	E	F	
1							
2							
3		Roll No	Name	ME	IT	HRM	
4		1011	Green	65	74	85	
5		1012	Nice	75	87	57	
6		1013	Nick	78	67	46	
7		1014	Joe	86	95	88	
8		1015	Clark	45	37	68	

To use Conditional Formatting to list out students who scored More than 65 in IT:

- 6. Select the range E4 to E8 for IT subject.
- 7. Go to Format-> Conditional Formatting; Conditional Formatting Dialog box appears.
- 8. In Condition1, Select **Call Value Is** in the First combo box, **Greater than** in Second combo box and type 65 in third combo box.
- 9. Now Click Format... button down, Format Cells dialog box appears; select formatting of your choice.

	Α	В	C	D	E	F	G	Н		J	K	L
1	1022								2	13		
	Conditional Formatting Condition 1 Cell Value Is greater than Preview of format to use when condition is true: No Form								Eorma	×		
2					<u>A</u> dd	>> [Delete	ОК		ancel	-	
3	100	Roll No	Name	ME	IT	HRM	Format	Cells				? 🛛
4		1011	Green	65	74	85						
5		1012	Nice	75	87	57	Font	Border	Patterns			
6		1013	Nick	78	67	46	Font:			Font style:	Size	<u>.</u>
7		1014	Joe	86	95	88		be Caslon Pro		Bold	8	
8		1015	Clark	45	37	68	E Ado	be Caslon Pro	o Bold	Italic	9	<u></u>
9	j.					3		be Fangsong be Garamond	Pro	Bold Bold Italic	× 10	~
10	-						Underline	9:		<u>C</u> olor:		
12									*			
13							Effects		-	Preview		
14							🔳 Stri	<u>k</u> ethrough		1		
15							Sup	erscript		A	aBbCcYy	Zz
17			0		0		- Sub	iscript				
18												
19							For Conc Underline	titional Format e, Color, and S	tting you ca Strikethroug	n set Font Styl h.	e,	Clear
20	-									8		
22										C	OK	Capcel
4 4	F FI	\Sheet1	Sheet2 /	Sheet3 /	- 0					L	VI	

10. Click OK to apply formatting. Click OK to apply condition.

	A B		C	D	E	F	
1							
2	1						
З		Roll No	Name	ME	IT	HRM	
4	1	1011	Green	65	74	85	
5		1012	Nice	75	87	57	
6	1	1013	Nick	78	67	46	
7		1014	Joe	86	95	88	
8		1015	Clark	45	37	68	

To Use Conditional Formatting to list out students who scored Between 60 and 80 in HRM.

- 11. Select the range F4 to F8 for HRM subject.
- 12. Go to Format-> Conditional Formatting; Conditional Formatting Dialog box appears.
- 13. In Condition1, Select **Call Value Is** in the First combo box, select **Between** in Second combo box, type 60 in third combo box and type 80 in the Fourth combo box.

14. Now Click Format... button down, Format Cells dialog box appears; select formatting of your choice.

	A B	C	D	E	F	G H I J K L						
1	Condition	al Formatt	ing		. U.	X						
	Condition 1											
	Cell Valu	e Is 🔽 be	etween		✓ 60	and 80						
	Preview of when cor	of format to undition is true:	ise		No F	ormat Set						
2	Add >> Delete OK Cancel											
3	Roll No	Name	ME	IT	HRM	Format Cells 🛛 🖓 🔀						
4	1011	Green	65	74	85							
5	1012	Nice	75	87	57	Font Border Patterns						
6	1013	Nick	78	67	46	Font; Font style; Size:						
7	1014	Joe	86	95	88	B Adobe Caslop Pro						
8	1015	Clark	45	37	68	Adobe Casion Pro Bold						
9						Adobe Fangsong Std R Bold 10						
10						Underline: Color:						
11	-											
13						- Effactor - Depuipu						
14						Strikethrough						
15						AaBbCcYvZz						
16						Subscript						
17						(<u> </u>						
10						For Conditional Formatting you can set Font Style,						
20						Underline, Color, and Strikethrough.						
21												
22						OK Cancel						
23												

15. Click OK to apply formatting. Click OK to apply condition.

	A	В	С	D	E	F
1			08. 			
2)					
3		Roll No	Name	ME	IT	HRM
4		1011	Green	65	74	85
5		1012	Nice	75	87	57
6		1013	Nick	78	67	46
7	1	1014	Joe	86	95	88
8		1015	Clark	45	37	68

ENO	ENAME	Basic Pay	HRA	DA	Gross Pay	IT	PF	Net Pay
E101	Harry	10000						
E102	Bright	18000						
E103	Sunny	20000						
E104	John	10000						
E105	Mink	19000						

3. Calculate HRA, DA, IT, PF, PF, Gross Salary, Net Salary from given data in a worksheet:

Where

-						
House Rental Allow	/ance	HRA	is	15%	of	Basic
Depreciation Allow	DA	is	13%	of	Basic	
Income Tax		IT	is	5%	of	Basic
Provident Fund		PF	is	9%	of	Basic
Gross Pay Net Pay	= =	Basic Gross	Pay + I Pay - I	HRA + DA IT - PF	N	

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through J3. Highlight and make them in **Bold** with center alignment.
- 3. Fill the table with given data for ENO, ENAME, and Basic Pay.

	A	B	C	D	E	F	G	Н	1	J
1										
2					1					
3		ENO	ENAME	Basic Pay	HRA	DA	Gross Pay	IT	PF	Net Pay
4		E101	Harry	10000						
5		E102	Bright	18000						
6		E103	Sunny	20000		(
7		E104	John	10000						
8	1	E105	Mink	19000		5. 2.				
9										

- 4. Select cell E4; type =15*D4/100 and hit enter button. 15% of Basic is calculated as HRA in the E4 cell.
- 5. Again select E4 cell; take cursor to the bottom right corner of the cell till it becomes + hold and drag down to copy the formula to the rest of the rows.
- Select cell F4; type =13*D4/100 and hit enter button. 13% of Basic is calculated as DA in the F4 cell.
- 7. Again select F4 cell; take cursor to the bottom right corner of the cell till it becomes+ hold and drag down to copy the formula to the rest of the rows.
- 8. Select cell G4; type =D4+E4+F4 and hit enter button. Sum of Basic, HRA and DA is calculated as Gross Pay in the G4 cell.

- 9. Again select G4 cell; take cursor to the bottom right corner of the cell till it becomes + hold and drag down to copy the formula to the rest of the rows.
- 10. Select cell H4; type =5*D4/100 and hit enter button. 5% of Basic is calculated as IT in the H4 cell.
- 11. Again select H4 cell; take cursor to the bottom right corner of the cell till it becomes + hold and drag down to copy the formula to the rest of the rows.
- 12. Select cell I4; type =9*D4/100 and hit enter button. 9% of Basic is calculated as PF in the I4 cell.
- 13. Again select I4 cell; take cursor to the bottom right corner of the cell till it becomes + hold and drag down to copy the formula to the rest of the rows.
- 14. Now the final report after calculation is like this:

	A	B	C	D	E	F	G	H	4	J
1							9.1			
2										
3		ENO	ENAME	Basic Pay	HRA	DA	Gross Pay	IT	PF	Net Pay
4		E101	Harry	10000	1500	1300	12800	500	900	11400
5		E102	Bright	18000	2700	2340	23040	900	1620	20520
6		E103	Sunny	20000	3000	2600	25600	1000	1800	22800
7		E104	John	10000	1500	1300	12800	500	900	11400
8		E105	Mink	19000	2850	2470	24320	950	1710	21660

4. Prepare Pivot Table.

Employee Name	Department	Salary Rs.
А	Sales	4000
В	Accounts	5000
С	Marketing	6000
D	Sales	4000
E	Accounts	8000
F	Marketing	4000

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through D3. Highlight and make them in **Bold** with center alignment.
- 3. Fill the table with given data for Employee Name, Department, and Salary Rs.

	Α	В	C	D	
1					
2					
3		Employee Name	Department	Salary Rs.	
4		A	Sales	3000	
5		В	Accounts	4000	
6		С	Marketing	5000	
7		D	Sales	6000	
8		E	Accounts	4000	
9		F	Marketing	8000	

4. Select the complete table go to Data menu, select "PivotTable and PivotChart Report".



5. A PivotTable wizard should appear.

PivotTable and PivotCha	rt Wizard - Step 1 of 3	? 🛛
	Where is the data that you want to analyze?	t
	What kind of report do you want to create? Pivot <u>T</u> able PivotCha <u>r</u> t report (with PivotTable report)	
	Cancel < Back Next >	jinish

6. Make sure that the "Microsoft Excel list or database" and "PivotTable" options are chosen. Click on the Next button.

	А	В	C	D	E	F
1						
2						1
3		Employee Name	Department	Salary Rs.		
4		A	Sales	3000		
5		B	Accounts	4000		
6		(C	Marketing	5000		
7		}D	Sales	6000		
8		Æ	Accounts	4000		
9		¦ F	Marketing	8000		
10 11 12	P	ivotTable and Pivo /here is the data that yo	tChart Wizaro	l - Step 2 of 3	3	? 🛛
14	B	ange: \$B\$3:\$D\$9			Broy	<u>v</u> se
15 16		Cancel	< <u>B</u> ack	<u>N</u> ext >	D	nish

7. Select the range of data for the pivot table and click on the Next button.

	A	В	C	D	Е	F	G	Н
1	8							
2		100						
3		Employee Name	Department	Salary Rs.				
4		A	Sales	3000				
5		В	Accounts	4000				
6		C	Marketing	5000				
7		D	Sales	6000				
8		E	Accounts	4000				
9		F	Marketing	8000				
10	6	T.	l.	17				
11	Piv	otTable and Pivot(hart Wizard	- Step 3 of 3				?⊠
12	1							
13								
14			4					
15			Where do	you want to put	the PivotTa	able report?		
16			0					
17			U U	New WORKSheet	i Sanas			
18			0	Existing worksh	eet			
19						<u>.</u>		
20								
21			Click Finish	to create your l	Pivot l'able r	eport.		
22		(1000	
23		Layout	Options	Cancel	$ \leq \underline{B}ac $	K Next	> <u> </u>	nish
24					-			

- 8. Select the position to create the new pivot table. It will automatically default to the cell that was highlighted when you started this process. Click on the Layout button.
- 9. Now drag the fields that you want to appear in the Page, Row, Column, and Data sections of the pivot table. In this example, we've dragged the Department field to the Row section and the Salary Rs. to the Data section.
- 10. Click on the OK button to continue.



11. Now click on the Finish button.

PivotTable and PivotChart Wizard - Step 3 of 3	? 🛛
Where do you want to put the PivotTable report?	
Click Finish to create your PivotTable report.	
Layout Options Cancel < Back Next >	Einish

12. Your pivot table should now appear on new sheet. What this pivot table displays is the total Salary for each Department.

	A	В
1		
2		
3	Sum of Salary Rs	
4	Department [Total
5	Accounts	8000
6	Marketing	13000
7	Sales	9000
8	Grand Total	30000
9	35	

5. From the table given below, reduce the total expenditure to Rs.16000 by reducing sales department's Expenditure by applying Goal seek.

Department	Expenditure Rs.
Production	4000
Sales	6000
Marketing	3000
Finance	5000
Total Expenditure	18000

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through C3. Highlight and make them in **Bold** with center alignment.
 - C8 f =SUM(C3:C6) ¥ В C A 1 2 Department Expenditure Rs. 3 Production 4000 4 Sales 6000 5 Marketing 3000 6 Finance 5000 7 8 **Total Expenditure** 18000 9
- 3. Fill the table with given data for Department and Expenditure Rs.

- Calculate the total expenditure by adding up all departments expenditure in cell C8 =Sum(C3:C6)
- 5. Select cell C8, Go to Tools-> Goal Seek...

<u>Eile E</u> dit	⊻iew	Insert	F <u>o</u> rmat	Tool	s <u>D</u> ata	<u>W</u> indow	<u>H</u> elp	
Ele Edit	yew insert Ponnat → 11 → B Z → 12 → SUM(C: B Department Production Sales			100 ** **	Spelling F7 Research Alt+Click Error Checking Speech Shared Workspace Share Workbooks Irack Changes O Compare and Merge Workbooks I			F7 ↓ :+Click 28
	Finano Total	ce Expend	diture		Protectio O <u>n</u> line C <u>G</u> oal See	on Collaboration 9k		•
				3	Sc <u>e</u> naric Formula <u>M</u> acro Add-Ins <u>A</u> utoCor <u>C</u> ustomi: <u>O</u> ptions.	s Auditing rect Options ze		•

- 6. Set Cell already contains C8.
- 7. Type 16000 in To Value box as we've to set Total Expenditure (C8) to 16000
- 8. By Changing Cell Sales Expenditure ie C4

S - 16	А	В	C
1			0
2		Department	Expenditure Rs.
3		Production	4000
4		Sales	6000
5		Marketing	3000
6		Finance	5000
7			10
8		Total Expenditu	are 18000
9			
10		Goal Seek	
11			
12		S <u>e</u> t cell:	C8
13		To value:	16000
14		_ Du shasaina sallu	
15		by <u>c</u> hanging cell:	\$C\$4
16			
17			
40		Concession of the local division of the loca	

- 9. Click OK
- 10. Goal Seek status is displayed. Observe Sales Expenditure ie C4 is adjusted to 4000 to get Total expenditure 16000

	A B	С	D
1			
2	Department	Expenditure Rs.	
3	Production	4000	
4	Sales	4000	
5	Marketing	3000	
6	Finance	5000	
7		<u>.</u>	
8	Total Expenditure	16000	
9	Goal Seek Status		×
11 12	Goal Seeking with Cell C8	ОК	
13		Cancel	
15	Target value: 16000 Current value: 16000	Step	
16 17		Pause	
18			-

6. Create an excel worksheet to demonstrate absolute and relative cell referencing using the following table:

Item	Quantity	Price	Total
Chair	4	Rs. 600	
Desk	4	Rs. 1700	
Lamp	3	Rs. 500	

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through E3. Highlight and make them in **Bold** with center alignment.
- 3. Fill the table with given data for Item, Quantity, and Price.

	D	l I	-	fx				
	A	В	C	D	0	1	E	F
1							10056	
2	<u></u>							
3		ltem	Quantity	Prie	ce	T	otal	
4		Chair	4	6	00			
5		Desk	4	17	00	2		
6	(I	Lamp	3	5	00	1		
7	2	150		1			12.2	
8					đ	6	Cu <u>t</u>	
9						1	⊆ору	
10					19	2	Paste	
11	4	-			1			
12							Paste Spe	ecial
13	1						Insert	
14							Delete	
15							Delece	
16							Clear Co <u>r</u>	<u>i</u> tents
17	-				1	-	Format C	ells
18	-				1	-		e hi
19	8 1	-		2				/idth
20							Hide	
21							Unbide	
22				1 2	-	-	<u>Sundo</u>	

- 4. To prefix the price with Rs. Tag, Right click on the price column, go to Format Cells...
- 5. Select Currency from **Category:** list box. On the right side select Rs. from combo box in **Symbol:**

(if you don't see Rs. in the box then change your Regional settings in the Control Panel)



6. In the Category: List box, select Custom and type currency format as Rs.#,##0

umber Alignment	Font	Border	Patterns	Protection
ategory: ieneral lumber iurrency vate ime recentage raction icientific ext <u>pecial</u> <u>ustom</u> <u>pelete</u> pe the number formation int.	Sam Rs. Iype Rs.# (* ; "Yes "Tru "On" [\$€-: Rs.# Rs.#	rple 2,400 ; t,##0 ";"Yes";"No e";"True";"F ;"On";"Off" 2] #,##0.00 t,##0.00); _(* (#,## "=alse" 10_);[Red]([\$ ne existing co	0.00);_(* ▲ ≈-2] #,#

7. Click OK.

	А	В	C	D	E
1					
2					
3		ltem	Quantity	Price	Total
4		Chair	4	Rs.600	
5		Desk	4	Rs.1,700	
6		Lamp	3	Rs.500	

Relative Reference

 Select cell E4 and calculate the amount by multiplying quantity and price i.e., =C4*D4

E4			<i>f</i> ∗ =C4*D	4	
_	A	В	C	D	E
1					112
2					
3		ltem	Quantity	Price	Total
4		Chair	4	Rs.600	Rs.2,400
5	2	Desk	4	Rs.1,700	
6	1	Lamp	3	Rs.500	
7	1.	1 13			

9. Drag down the result in the E4 cell to the rest of the rows.

	A	B	C	D	E
1	2				
2					
3	1	Item	Quantity	Price	Total
4		Chair	4	Rs.600	Rs.2,400
5		Desk	4	Rs.1,700	Rs.6,800
6		Lamp	3	Rs.500	Rs.1,500

- 10. Here in E5 the formula is copied as =C5*D5
- 11. Similarly E6 contains the formula =C6*D6

This is called relative referencing where the row and column references change when you copy the formula to another cell because the references are actually offsets from the current row and column.

Absolute Reference

- 12. Assume that the Sales tax is applied on the items purchased. Then we need to calculate a fixed sales tax on every item purchased.
- 13. For this we use absolute referencing which allows us to calculate sales tax in the right way.
- 14. Assume that the Sales tax is 10%

	A	B	C	D	E	F
1	3Ú					
2						
3	04 	ltem	Quantity	Price	Sales Tax	Total
4		Chair	4	Rs.600		
5		Desk	4	Rs.1,700		
6		Lamp	3	Rs.500		
7						
8						
9		Sales Tax	10%			

15. Sales Tax column is calculated as

Quantity * Price * Sales Tax

16. For this select cell E4, type =C4*D4*\$C\$9

	E4	-	<i>f</i> x =0	24*D4*\$C\$	9		
	A	В	C	D	E	F	
1	0.000	10 AMORT	1000				
2							
3		ltem	Quantity	Price	Sales Tax	Total	
4		Chair	4	Rs.600	Rs.240	8	
5	5	Desk	4	Rs.1,700		i) (i	
6	1	Lamp	3	Rs.500			
7	1	100					
8	1						
9		Sales Tax	10%				

17. Drag down the result to copy the formula

	А	В	C	D	E	F	T
1	1						
2	2		-01				T
3		ltem	Quantity	Price	Sales Tax	Total	L
4	6	Chair	4	Rs.600	Rs.240	16000 and 180	
5		Desk	4	Rs.1,700	Rs.680		
6		Lamp	3	Rs.500	Rs.150		
7							
8							
9		Sales Tax	10%				

- 18. Observe you'll in cell E5 formula is =C5*D5*\$C\$9
- 19. And cell E6 contains formula =C6*D6*\$C\$9

Here the use of \$ before row and column name makes it absolute i.e., the row and column references do not change when you copy the formula because the reference is to an actual cell address. This is called absolute referencing.

20. Now calculate Total column which is calculated as

Quantity * Price + Sales Tax

21. Select cell F4, type formula =C4*D4+E4

F4 👻			<i>f</i> x =0	24*D4+E4		
	A	В	С	D	E	F
1	0.000	And	1000			AN 101
2						
3		ltem	Quantity	Price	Sales Tax	Total
4		Chair	4	Rs.600	Rs.240	Rs.2,640
5		Desk	4	Rs.1,700	Rs.680	
6		Lamp	3	Rs.500	Rs.150	
7	1	1				
8						
9		Sales Tax	10%			

Drag down the result in the F4 cell to the rest of the rows. This is relative referencing. Calculation of Sales Tax column is done using the absolute reference method.

	А	В	C	D	E	F	
1	-		2		10 D		
2						Autor 1.200	
3		ltem	Quantity	Price	Sales Tax	Total	
4		Chair	4	Rs.600	Rs.240	Rs.2,640	
5		Desk	4	Rs.1,700	Rs.680	Rs.7,480	
6		Lamp	3	Rs.500	Rs.150	Rs.1,650	
7							
8							
9		Sales Tax	10%				
1000		1.1					

7. Create an excel worksheet to demonstrate the use of mixed referencing with multiplication table.

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through L3. Highlight and make them in **Bold.**
- 3. Similarly, select cell B4, type row headings through B13. Highlight & make them in **Bold.**

S - 26	А	B	C	D	E	F	G	H	1	J	K	L
1			1									
2												
3		*	1	2	3	4	5	6	7	8	9	10
4		1	8	_								
5		2			,	: - 9			,		23	
6		3										
7		4	- 32			÷ - 24			2			
8		5	- 18		8 9		18		S - 5		- 18	
9		6			1	i i			Î. j	i i	, i	
10		7					1				1	
11		8										
12		9	18				18					
13		10			ļ,	£ - 9			Ļ,	5 - 2		
14		- 10 - 11				- 1			1			

Mixed References

 To create a multiplication table we make use of mixed references. The formulas in the table calculate the multiplication for number 1 to 10. The formula in cell C4 is =\$B4*C\$3

	C4	-		fx	=\$B	4*C	63					
	A	В	C	D	E	F	G	Н		J	K	L
1			- 1	~	-	-						
2		-12 - 1	-									
3		*	1	2	3	4	5	6	7	8	9	10
4		1	1			5	8			8	2	
5		2	Ĩ		1							
6		3									100	
7		4										
8		5	100									
9		6				: - 2		_		: 2		
10		7										
11		8	02			2 - 23				()		
12		9	3				8				18	
13		10			1							
14			- 1				- 11					

- 5. Notice that both cell references are mixed. The reference to cell B4 uses an absolute reference for the column (\$B), and the reference to cell C3 uses an absolute reference for the row (\$3).
- 6. As a result, this formula from cell C4 can be copied down and across, and the calculations will be correct.

	A	B	C	D	E	F	G	H	- E	J	Κ	L	
1	2		1								1		
2													
3		*	1	2	3	4	5	6	7	8	9	10	
4	0	1	1	2	3	4	5	6	7	8	9	10	
5		2	2	4	6	8	10	12	14	16	18	20	
6		3	3	6	9	12	15	18	21	24	27	30	
7		4	4	8	12	16	20	24	28	32	36	40	
8		5	5	10	15	20	25	30	35	40	45	50	
9		6	6	12	18	24	30	36	42	48	54	60	
10		7	7	14	21	28	35	42	49	56	63	70	
11		8	8	16	24	32	40	48	56	64	72	80	
12		9	9	18	27	36	45	54	63	72	81	90	
13		10	10	20	30	40	50	60	70	80	90	100	
14													

 For example, the formula in cell F7 is =\$B7*F\$3

If C4 used either absolute or relative references, copying the formula would produce incorrect results.

Formula where either the row or column reference is relative, and the other is absolute is called mixed referencing.

8. Create an excel worksheet with the data as follows:

		NONES
YEAR	SALES	EXPENSE
1997	250	100
1998	300	150
1999	350	200
2000	430	250
2001	500	300
2002	550	350
2003	600	400
2004	650	450

AMOUNT IN CRORES

Use the above table to create Column Chart

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through D3. Highlight and make them in **Bold.**
- 3. Fill the table with given data for Year, Sales, and Expense.

	Α	B	C	D
1				
2				
3		YEAR	SALES	EXPENSE
4		1997	250	110
5		1998	300	150
6		1999	350	200
7		2000	430	250
8		2001	500	300
9		2002	550	350
10		2003	660	400
11		2004	650	450
12		55		20 E S

4. Select the cells C3 to D11, go to Insert menu select Chart... option

:1	Eile	<u>E</u> dit <u>V</u> ie	w	Inser	t	Format	<u>T</u> ools	Data
1			-		<u>R</u> o	ws		- 3
Ari	al				⊆o	lumns		= :
	C3	+			We	orksheet		
	A	В		11	Ch	art		
1	8			f.c	Eu	nction		
3		YEAR	SA		Na	me		•
4 5 6		1997 1998 1999		2	<u>P</u> ic Hy	ture perlink	Ctrl+K	•
7		2000				*		
8		2001		500	l	300]	
9		2002		550		350)	
10		2003		660		400		
11		2004	1	650	1	450		

5. On the Chart Wizard Step 1 of 4, in the Chart Type list box, click Column. In the Chart Sub-type list, click the first chart: Clustered Column



- 6. Click Next
- 7. In the Chart Wizard Step 2 of 4, make sure the Columns radio button is selected.

8. In the Chart Wizard Step 2 of 4, select Series tab, in the Category (X) axis labels, select column from B4:B11 by clicking on the 🛐 button.

	A	В	С	D	E	F	G	Н		J	K
1	l.										1
2					6	dener -	4	0	1	1	
3		YEAR	SALES	EXPENSE	Source	Data					? 💌
4		1997	250	110	-	-					
5		} 1998	300	150	Data	Range Ser	ies				
6		1999	350	200							1
7		2000	430	250	5.00 I.	700				1	
8		{ 2001	500	300		600				_	
9		2002	550	350		500					
10		2003	660	400		400				SALES	
11		2004	650	450		300				EXPENSE	
12				1		200				-	
13						100 -				-	
14							1000 000	0 0001 00	00,0000,000		
15						1991 14	330 1333 200	10 2001 20	02 2003 200	4	
16											
17					<u>S</u> erie	5					
18					SAL	5	Nam	e: ='8	9'!\$C\$3		
19					EXPE	ENSE					
20			· · · · · · · · · · · · · · · · · · ·				_	-			
21							⊻ <u>V</u> alu	es: ='8	3'!\$C\$4:\$C\$11	1	<u>.</u>
22	1				F	dd Ren	nove				
23											
24	1	1			Cater	ory (X) avis l	ahels	='8'1¢8¢	4·¢8¢11		1
25					Cdree			-0:40\$			
26											
27						-				-	
28	-						Cancel	< <u>B</u> ack	<u>N</u> ext >	<u> </u>	ish
29											

9. Click Next

10. In the Chart Wizard Step 3 of 4, Type **Yearly Sales & Expenses** as Chart Title, **Year** in Category (X) axis and **Sales & Expenses** in Category (Y) axis. Click Next



11. In step 4 of 4, click Finish

YEAR	SALES	EXPENSE	
1997	250	110	
1998	300	150	
1999	350	200	
2000	430	250	
2001	500	300	
2002	550	350	
2003	660	400	
2004	650	450	





9. Create an excel worksheet with the data as follows for Life Expectancy at birth:

COUNTRY	CODE	TOTAL	MALE	FEMALE
Algeria	AG	69.24	68.97	70.46
Netherlands	NL	78.15	75.28	81.17
Venezuela	VE	72.95	69.97	76.16
Australia	AS	80.14	77.22	83.23
Yemen	YM	59.98	58.17	61.88
Switzerland	WZ	38.11	36.86	39.4

Use the above table to create Bar Chart

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through D3. Highlight and make them in **Bold.**
- 3. Fill the table with given data for Country, Code, Total, Male and Female.

	Α	В	C	D	E	F	
1	S		1		-		
2							
3		COUNTRY	CODE	TOTAL	MALE	FEMALE	
4		Algeria	AG	69.24	68.97	70.46	
5		Netherlands	NL.	78.15	75.28	81.17	
6		Venezuela	VE	72.95	69.97	76.16	
7		Australia	AS	80.14	77.22	83.23	
8		Yemen	YM	59.98	58.17	61.88	
9		Switzerland	WZ	38.11	36.86	39.4	
	-						

4. Select the cells D3 to F9, go to Insert menu select Chart... option

:1	Eile	Edit View	Inse	ert	Format	Ţ¢	ools	Da	ita	<u>W</u> indo	w
1	2° 5	111		<u>R</u> ov	IS				3	12	÷
Aria	al	-		⊆olu	Imns					a	
	C3	+		Wor	ksheet					_	_
	A	В	6	Cha	rt					F	
1		2	fr	Eup	ction						1
2											
3		COUNTRY		Nam	ne				FEN	ALE	1
4		Algeria		Picto	Jre)			70.46	1
5		Netherland	0		- بالعال	~	aluz			81.17	
6		Venezuela	69	пур	erijnk	C	7±0		i i	76.16	
7		Australia			*	_			101	83.23	
8	1	Yemen	Y	M	59.	98	58.1	7	1	61.88	1
9		Switzerland	A N	/Z	38.	11	36.8	36		39.4	

5. On the Chart Wizard Step 1 of 4, in the Chart Type list box, click Bar. In the Chart Subtype list, click the chart on 1st column, 2nd row: Clustered Bar With 3-D Visual Effect



6. Click Next

7. In the Chart Wizard Step 2 of 4, make sure the Columns radio button is selected. Click Next



8. In the Chart Wizard Step 3 of 4, type Life Expectancy at Birth in Chart Title, Country in Category (X) axis and Age in Category (Z) axis. click Next



9. In step 4 of 4, click Finish

CODE	TOTAL	MALE	FEMALE
AG	69.24	68.97	70.46
NL	78.15	75.28	81.17
VE	72.95	69.97	76.16
AS	80.14	77.22	83.23
YM	59.98	58.17	61.88
WZ .	38.11	36.86	39.4
	CODE AG NL VE AS YM WZ	CODE TOTAL AG 69.24 NL 78.15 VE 72.95 AS 80.14 YM 59.98 WZ 38.11	CODE TOTAL MALE AG 69.24 68.97 NL 78.15 75.28 VE 72.95 69.97 AS 80.14 77.22 YM 59.98 58.17 WZ 38.11 36.86

Life Expectancy at Birth


10. Create an excel worksheet with the data as follows:

Age	Consumption
0-5	5%
6-12	15%
13-20	25%
21-35	30 %
36-60	15%
above 60	10%

Use the above table to create Column Chart

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through C3. Highlight and make them in **Bold.**
- 3. Fill the table with given data for Age, and Consumption.

	Α	В	C
1	3 		
2			
3		Age	Consumption
4		0-5	5%
5		6-12	15%
6		13-20	25%
7		21-35	30%
8	2	36-60	15%
9		above 60	10%

4. Select the complete table, go to Insert menu select Chart... option

:1	Eile	<u>E</u> dit <u>V</u> i	ew	Inse	ert	Format	Tools	Da
10	1		8		Ro	ws		
Ari	al				⊆o	lumns		
	B	3 🚽 👻						
	A	В		1	СЬ	art		
1			~	fr	Eu	nction		
2				5-		necionini		
3		Age	Co		Na	me		*
4		0-5			Pic	ture		
5		6-12		0			Children	200
6		13-20]	8	Πу	penijnk	Ctri+k	
7	2 - 2	21-35	5.			۲		
8		36-60			1	15%		
9	1	above 60	1			10%		

5. In the Chart Wizard Step 1 of 4, in the Chart Type list box, click Pie. In the Chart Subtype list, click the first. Click Next

Chart Wizard -	Step 1 of 4 - (Chart Type		?
Standard Types	Custom Types			
Chart type:		Chart sub-type	n	
Bar E Bar	-			
XY (Scatter)			9	
Surface Bubble	~			
		Pie. Displays th to a total.	ne contribution	n of each value
		Press an	id Hold to ⊻iew	/ Sample
	Cancel	< Back	<u>N</u> ext >	Einish

- 6. In the Chart Wizard Step 2 of 4, make sure the Columns radio button is selected. Click Next
- 7. In the Chart Wizard Step 3 of 4, click Next
- 8. In step 4 of 4, click Finish

Age	[Consumption]	
0-5	5%	
6-12	15%	
13-20	25%	
21-35	30%	
36-60	15%	9
above 60	10%	

Consumption



11. Create an excel worksheet to demonstrate macros.

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through J3. Highlight and make them in **Bold** with center alignment.
- 3. Fill the table with sample data for RNO, MOB, ME AFM, MM, SFM, BL, IT and calculate the Total.

0	A	B	C	D	E	F	G	H	_1	J	K
1					MA	RKS L	IST				
2						-					
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	TOT	
4		1	65	98	65	87	54	64	84	517	
5		2	54	80	84	73	91	62	41	485	
6		3	55	62	69	76	83	54	46	445	
7		4	56	44	85	79	67	55	51	437	
8		5	57	46	53	82	40	56	56	390	
9		6	58	48	75	85	64	74	61	465	
10		7	50	50	75	00	65	45	66	449	

4. From the Tools menu, point to Macro and click on Record New Macro.

·B)	Eile	<u>E</u> dit ⊻iew	Insert Forn	nat <u>T</u> oo	ols <u>D</u> ata <u>W</u> indow	Help	1				
:0	1		1 2 3 12	ABC	Spelling F	7	2	Σ - <u>A</u> ↓	X 1	100%	0
Ari	al	1	• 10 • B	I	<u>R</u> esearch Alt+Clio	:k	,	€.0 .00 0.€ 00.		🔲 • 🖏	• • <u>A</u> •
	025	j 👻	fx	1	Error Checking						
	A	В	C		Share <u>d</u> Workspace			G	Н	ŧ	J
1	ii				Share Work <u>b</u> ook						
2					Protection						
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4		1	65		Cool Sook	1.6		54	64	84	517
5		2	54		Goal Seek			91	62	41	485
6		3	55		Formula Auditing	<u> </u>		83	54	46	445
7	11	4	56		Macro	•	•	Macros			Alt+F8
8		5	57		<u>⊂</u> ustomize		0	Record N	ew Macro		
9		6	58		Options			Security.			
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11		8	60	5	2 57	91		Microsoft	Script Edite	ም ለዙታናት	ift_E11
40		•		-		50	~	MICLOSOFC	ocube Faire	A MICTON	10-FI 11

5. From the **Record Macro** dialog box displayed, enter a name for the macro in the **Macro name:** text box as Toppers and assign a shortcut key t (ctrl+t).

	A	В	C	D	E	F	G	H	1	J
1	1				MA	RKS LIST				
2										
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	тот
4		1	65	00	65	07	E A	64	84	517
5		2	R	ecord Mac	ro			62	41	485
6		3	M	acro name:				54	46	445
7		4	Т	loppers				55	51	437
8		5	SI	hortcut key:	Store	macro in:		56	56	390
9		6		Ctrl+	t This V	Vorkbook	*	74	61	465
10		7	D	escription:				45	66	448
11		8	β	4acro recorde	ed 4/5/2010 by	y Sarah		85	71	482
12		9						65	76	436
13		10			F		Canal	44	81	440
14		11					Cancer	64	86	447

6. The default description is displayed in the **Description**: text box, and contains the date and user name. If required, change it.

- 7. To begin recording, click **OK**.
- 8. We will filter top 10 students of the class. For this select header rows, from RNO to TOT then go to Data->Filter-> AutoFilter

🕑 Eile	Edit <u>V</u> iew	Insert Form	nat <u>T</u> ools	Dat	a <u>W</u> indow <u>H</u> elp			
0 💕		1 1 1 1 1 1 1	X 00 6	₹↓	<u>S</u> ort	50	4 100%	• 0
Calibri		• 12 • B	I U		Eilter		AutoEilte	er
B3	3 👻	∱ RNO	104 - - 144		Su <u>b</u> totals		Show All	
A	B.	C	D		Validation		<u>A</u> dvance	ed Filter
1	sti 🔻 🗙			83	T <u>e</u> xt to Columns			
2		1		17	PivotTable and PivotChart Report			
3	RNO	MOB	ME		 Import External Data		IT	TOT
4	1	65	98		Import External Data	4	84	517
5	2	54	80		List	2	41	485
6	3	55	62		<u>X</u> ML	4	46	445
7	4	56	44	1	<u>R</u> efresh Data	5	51	437
8	5	57	46		*	6	56	390

	A B	C	D	E	F	G	Н	E.	J
1	Sti 🔻 🗙			MAR	KS LIST				
2									
3	RNO 🖵	МОВ	ME	AFM 🚽	MM	SFM 🖵	BL 👻	IT 🔻	тот 🖵
4	1	65	98	65	87	54	64	(All)	^
5	2	54	80	84	73	91	62	(Custom.)
6	3	55	62	69	76	83	54	390 413	
7	4	56	44	85	79	67	55	421	
8	5	57	46	53	82	40	56	429	
9	6	58	48	75	85	64	74	436	
10	7	59	50	75	88	65	45	440	
11	8	60	52	57	91	66	85	445	
12	9	61	54	57	56	67	65	448	
13	10	62	56	73	56	68	44	453	
14	11	63	58	53	69	54	64	464	
15	12	64	60	76	63	70	49	466	
40	10	00	6.0		50	74	50	473	~

9. All the headers are now having small drop down arrows. Click on arrow of TOT field, select Top 10

10. TOP 10 AutoFilter dialog box appears, make sure 10 is selected in the second box, click OK.

A	B	C	D	E	F	G	Н		J
1	Sti 🔻 🗙			MAR	KS LIST				
2	RNO	MOB	ME	AFM	MM	SFM	BL▼	ITT	TOT
4	1	65	98	65	87	54	64	84	517
5	2	54	80	84	73	91	62	41	485
6	3			col			54	46	445
7	4	lop 10	AutoFilter	1			55	51	437
8	5	Show —					- 56	56	390
9	6	Тор		10	C Iter	ns 💌	74	61	465
10	7			-			45	66	448
11	8						- 85	71	482
12	9				UK		65	76	436

	A	В	C	D	E	F	G	Н	1	J		
1	MARKS LIST											
2					frat-market							
3			MOB -	ME		MM -	SFM -	BL -	IT 🚽	TOT		
4		1	65	98	65	87	54	64	84	517		
5		2	54	80	84	73	91	62	41	485		
20		17	69	70	70	63	81	64	74	491		
21)	18	70	45	69	67	83	89	72	495		
22		19	71	45	68	71	85	87	70	497		
23		20	72	87	67	75	87	63	63	514		
24	1	21	69	84	66	79	44	67	89	498		
25		22	66	81	55	83	74	76	64	499		
29		26	54	69	74	88	68	91	54	498		
31		28	48	63	75	84	74	48	94	486		

11. You'll get 10 students names who got highest marks in the class.

12. To stop recording, either click the stop button from small menu displayed on the left side of the window or from the **Tools** menu, point to **Macro** and click on **Stop Recording**.

:图)	Eile	Edit <u>V</u> iew	Insert Form	at <u>T</u> ool	s <u>D</u> ata <u>W</u> indo	w <u>H</u> elp					
: 🗅	1		Q 1 450 10	ABC &	Spelling	F7	2	Σ - Å↓	X 1	4 100%	
Cal	ibri	1	- 12 - B	I 🕰	<u>R</u> esearch Alt	+Click	,	€.0 .00 0.€ 00.		- 3	• <u>A</u> -
	B3	•	f₂ RNO	1	Error Checking						
	А	В	C		Share <u>d</u> Workspace	e		G	H	1	J
1					Share Workbook						
2					Protection						
3		RNO	МОВ 🚽	N	Online Collaboratio	nn 🕨	S	FM 🚽	BL	IT 🖵	TOT
4		1 65			Carl Carl			54	64	84	517
5		2	54		Goal Seek			91	62	41	485
20		17	69		Formula Auditing	•		81	64	74	491
21		18	70		Macro	•	•	Macros			Alt+F8
22		19	71		Customize			Stop <u>R</u> ec	ording		
23		20	72		Options			Security.			
24		21	69		8			Visual Bas	sic Editor		Alt+E11
25		22	66	81	. 55	83		Microsoft	Script Edito	v Altish	if⊦⊥F11
29		26	54	69	74	88	-	vo		24	490
31		28	48	63	3 75	84	6	74	48	94	486

13. Now we'll create a macro that will remove autoFilter and display all content. For this again From the **Tools** menu, point to **Macro** and click on **Record New Macro**

:12	Eile	<u>E</u> dit <u>V</u> iew	Insert Form	at <u>T</u> ools	s <u>D</u> ata <u>W</u> ind	low <u>H</u> elp	4				
			Q. 🛷 📖	X ***	Spelling	F7	2	Σ - Å↓	X 🛍	4 100%	• • •
Aria	əl		- 10 - B	I	Research A		,	00. 00.		🗄 - 🖑	• - <u>A</u> -
	P48	-	f _x	*	Error Checking	×	_				
	A	В	C		Share <u>d</u> Workspa	ice		G	Н	E C	J
1					Share Workbook	un l					
2					Protection			1			
3		RNO	МОВ 🔫	N	- Online Collabora	tion 🕨	5	SFM 🚽	BL 🖵	IT 🖵	тот 🖵
4		1	65		-	2085965 X8		54	64	84	517
5		2	54		Goal Seek			91	62	41	485
20		17	69		Formula Auditing	, 		81	64	74	491
21	5	18	70		<u>M</u> acro	•		Macros			Alt+F8
22		19	71		<u>C</u> ustomize		•	Record N	ew Macro		
23		20	72		Options			<u>S</u> ecurity.			
24		21	69		*		1	Visual Bas	sic Editor	4	Alt+F11
25		22	66	81	55	83		Microsoft	Script Edito	vr Alt∓Shi	ift+F11
29		26	54	69	74	88		00	Delibe Edice	24	490
31		28	48	63	75	84		74	48	94	486

14. From the **Record Macro** dialog box displayed, enter a name for the macro in the **Macro name:** text box as Stoppers and assign a shortcut key p (ctrl+p).

	A	B	С	D	E	F	G	H	1	J
1					MA	RKS LIST				
2										
3		RNO -	MOB	ME 🚽	AFM 🔫	MM	SFM 👻	BL 👻	IT 🚽	TOT
4		1	FE	0.0	6E	07	54	64	84	517
5		2	Re	cord Macr	0			62	41	485
20		17	Ma	cro name:				64	74	491
21		18	St	oppers				89	72	495
22		19	She	ortcut <u>k</u> ey:	Store m	acro in:		87	70	497
23		20		Ctrl+ p	This W	orkbook	*	63	63	514
24		21	De	scription:				67	89	498
25		22	Ma	acro recordeo	d 4/5/2010 by	Sarah		76	64	499
29		26						91	54	498
31		28			<u> </u>		Grand	48	94	486
34							Cancel			

- 15. To begin recording, click **OK**.
- 16. We will stop filtering top 10 students of the class. For this go to Data->Filter-> AutoFilter which will deselect the AutoFilter option.

:B)	Eile	<u>E</u> dit <u>V</u> iew	Insert Form	at <u>T</u> ools	Data	Window	Help				
10	1		Q 49 10	* •	ź↓	<u>S</u> ort			50	-	
Aria	əl	1	10 - B	I U		Eilter			•	AutoEilt	er
-	P48	-	fx			Su <u>b</u> totals	6			Show Al	í –
	A	В	С	D		Validation				Advance	ed Filter
1	8					T <u>e</u> xt to Col	umns				
2					87	PivotTable /	and PivotChar	rt Report			
3		RNO 🖵	MOB	ME	<u>[]++]</u>	Import Exte	anal Notena	encoporenn	. 🗊	IT 🖵	тот 🖵
4	i i	1	65	98			anai <u>D</u> aca		4	84	517
5		2	54	80		List			2	41	485
20		17	69	70		<u>X</u> ML			• 4	74	491
21		18	70	45	ų.	<u>R</u> efresh Da	ta		9	72	495
22		19	71	45			*		7	70	497
23		20	72	87		67	75	87	63	63	514
24		21	69	84		66	79	44	67	89	498
25		22	66	81		55	83	74	76	64	499
29		26	54	69		74	88	68	91	54	498
31		28	48	63		75	84	74	48	94	486

17. To stop recording, from the Tools menu, point to Macro and click on Stop Recording.

:B)	File	<u>E</u> dit <u>V</u> iew	Insert For	rmat <u>T</u> ool	s <u>D</u> ata <u>W</u> indow	Help					
10	2		1 🕰 🖤 🛱	ABC X	Spelling F	7	2	Σ - Å	X↓ 🛄	4 100%	• • •
Aria	əl		• 10 • B	I	Research Alt+Clic	:k	,	€.0 .00 0.€ 00.		🗖 🕶 👌	» - <u>A</u> -
	P48	•	fx	1	Error Checking						
	A	В	C		Share <u>d</u> Workspace			G	Н	ŧ	J
1					Share Work <u>b</u> ook						
2					Protection	•					
3		RNO	MOB	N	Online Collaboration	•	5	SFM	BL	IT	TOT
4	1 1	1	65		Carl Sach	1.6		54	64	84	517
5		2	54		Goal Seek			91	62	41	485
6	į į	3	55		Formula Auditing	•		83	54	46	445
7		4	56		Macro	•	•	Macros			Alt+F8
8		5	57		<u>C</u> ustomize			Stop Rec	ording		
9		6	58		Options			Security.			
10		7	59		۲			Visual Ba	sic Editor		Alt+F11
11		8	60	52	57	91	600	Microsoft	Script Edite	or Alt+Sh	ift+F11
10	2	•	C4	E.4	E7	EC	-	- acrosore	. Seripe Edici		meri II

18. To create a button and assign an Excel macro to it

- 19. If the **Forms** toolbar is not displayed, right click on any toolbar that is visible and from the pop-up menu that is displayed select **Forms**.
- 20. To create a button, click the **Button** icon on the **Forms** toolbar.

Forms					-	×
Aa ab [^{xvz}]	0		聞	6		옙
Button						

- 21. Then, click and drag the mouse to the intended button size.
- **22.** Rename the button with **"Top 10"**
- 23. Right-click on the button corner and select "Assign Macro..."

	A	В	C	D	E	F		GH	1	Ê.	J
			Forms Aa ab	[^{xvz}] 🚄			15				
1					MAF	RKS LI	ST				
2					о 0 То	p 10	2		_		
3		RNO	MOB	ME	AFM	M	ň	Cu <u>t</u>		IT	тот
4		1	65	98	65	G.	Ē	⊆opy	64	84	517
5		2	54	80	84		Ъ	<u>P</u> aste	62	41	485
6		3	55	62	69		1	Edit Te <u>x</u> t	54	46	445
7	77 - 25 16 - 84	4	56	44	85			Grouping	55	51	437
8		5	57	46	53			Order N	56	56	390
9	x 8 x 5	6	58	48	75				74	61	465
10		7	59	50	75		23	Assign Macro	45	66	448
11		8	60	52	57	2	y.	Eormat Control	85	71	482

24. The **Assign Macro** dialog box will be displayed.

	A	В	С	D	E	F	G	Н	I I	J
			Forn Aa	ns ab [^{xvz}] 🔳			11 d 🗶	12	× • 8	
1					MA	RKS LIST				
2					о т от	op 10				
3		RNO	MOB	Accion Mac	0				5	тот
4		1	6	Assign Maci	10				Ľ	517
5		2	9	Macro name:						485
6		3	5	Toppers				<u> </u>	OK	445
7		4	5	Stoppers Toppers					Cancel	ן 437
8		5	5	BALL-LALIE.						390
9		6	5						Edit	465
10		7	5					1	Record	448
11		8	e						500001001011	482
12		9	e							436
13		10	C					-		440
14		11	e	L	[447
15		12	e	Macros in:	All Open V	Vorkbooks		*		466
16		13	6	Description Macro recorde	d 4/5/2010 by	mukhtar				421
17		14	e	macro recorde	a 17572010 Dy	manical				458
10		3								

25. Select the **Toppers** Macro and Click on the **OK** button.

	A B	C	D	E	F	G	н		J
		Form	s ab [<u>***</u>] <i>=</i> =						
1	_			MA	RKS LIST				
2	_			Т	op 10	o Stop			
3	RNO	MOB	ME	AFM	MM	SFM	BL	IT	тот
4	1	6		t	L.	1	12 3		517
5	2		issign maci	10					485
6	3	1	<u>Macro name:</u>						449
7	4		Stoppers				<u> </u>	ОК	437
8	5		Stoppers Toppers					Cancel	390
9	6		6.5 5 5 835						465
10	7							Edit	448
11	8						R	ecord	482
12	9								436
13	10								440
14	11								447
15	12				. O. T				466
16	13		riacros in:	All Open V	VORKDOOKS				421
17	14		Description Aacro recorde	d 4/5/2010 by	mukhtar				458
18	15			.a .jojzoro by	manuruu				464
10									

26. Similarly create another button and assign **Stoppers** macro to it and click OK button

27. As a result you'll have two buttons that displays top 10 students and another resets the filter.

	A	В	C	D	E	F	G	H	1	J
1			17 PR		MAR	KS LIST	100	5%. 	i.	
2				Top 10			Stop			
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	тот
4		1	65	98	65	87	54	64	84	517
5		2	54	80	84	73	91	62	41	485
6		3	55	62	69	76	83	54	46	445
7		4	56	44	85	79	67	55	51	437
8		5	57	46	53	82	40	56	56	390
9		6	58	48	75	85	64	74	61	465
10		7	59	50	75	88	65	45	66	448
11		8	60	52	57	91	66	85	71	482
40	- 30	•	C1	E A	F 7	FC	67	CE	70	120

To run a macro using the Tools Macro command

- From the **Tools** menu, point to **Macro** and click on **Macros**.
- From the **Macro** dialog box displayed, click on the name of the macro you wish to run in the **Macro name:** list box.
- Click the **Run** button.

To run a macro using the assigned shortcut key

• Press **Ctrl**+?, with ? is the letter which you assigned.

To delete a button

• Click on button and press the **Delete** key.

12. Create the following worksheet in Excel.

RNO	MOB	ME	AFM	MM	SFM	BL	IT	TOT	AVG	GRADE	MAX	MIN
1												
2												
3												
4												
5												

- a) Fill the TOTAL column.
- b) Fill the AVERAGE column.
- c) Grade as

If average >=70, Distinction If average >=60 and average <70, 1^{st} class If average >=50 and average <60, 2^{nd} class If average >=40 and average <50, 3^{rd} class Else fail.

- d) Min
- e) Max
- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Select cell B3, type the column headings through N3. Highlight and make them in **Bold** with center alignment.
- 3. Fill the table with sample data for marks of MOB, ME, AFM, MM, SFM, BL, and IT.

	Α	В	C	D	E	F	G	H	11	J	K	L	M	N
1	11-17												1	
2														
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	тот	AVG	GRAD	MAX	MIN
4		1	65	98	65	87	54	64	84				n n 6 0	
5		2	54	80	84	73	91	62	41					
6		3	55	62	69	76	83	54	46					
7		4	56	44	85	79	67	55	51					
8		5	57	46	53	82	40	56	56					

4. Select cell J4, click on solution on formula bar; select **Sum** from Insert Function dialog box. Select cells C4 through I4, select OK the formula will look like

=SUM(C4,D4,E4,F4,G4,H4,I4) or =SUM(C4:I4)

	يل ا	4	-	<i>f</i> _x =	SUM(C4	4:14)								
	A	В	C	D	E	F	G	Н	Î.	J	K	L	M	N
1										an and a second		1000		
2														_
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	TOT	AVG	GRAD	MAX	MIN
4		1	65	98	65	87	54	64	84	517				
5		2	54	80	84	73	91	62	41					
6		3	55	62	69	76	83	54	46					
7		4	56	44	85	79	67	55	51					
8		5	57	46	53	82	40	56	56					8

5. Drag down the result to copy function on to other rows

6. Similarly select cell K4 and calculate average as

=AVERAGE (C4,D4,E4,F4,G4,H4,I4)

	K	4	•	f _x =	AVERA	GE(C4:	14)	/					10 1	
	А	В	C	D	E	F	G	н	1	J	K	L	M	N
1														-
2						_				_				_
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	TOT	AVG	GRAD	MAX	MIN
4		1	65	98	65	87	54	64	84	517	73.9			
5		2	54	80	84	73	91	62	41	485	Π			
6		3	55	62	69	76	83	54	46	445	0			
7		4	56	44	85	79	67	55	51	437				
8	10	5	57	46	53	82	40	56	56	390				

or

=AVERAGE(C4:I4) or = J4/7

7. Drag down the result to copy function on to other rows

- 8. To calculate Grade, we will make use of formula in cell L4 as follows
 - = IF(AND(K4>=70), "Distinction", IF(AND(K4>=60,K4<70), "First", IF(AND(K4>=50,K4<60), "Second", IF(AND(K4>=40,K4<50), "Third", "Fail"

))))

2	Ŀ	4	•	fx =	IF(AND)	(K4>=7(), "Disti	nction"	IF (AND	(K4>=6	0,K4<7	0),"First",IF(A	ND(K4>	=50,K4	<60),
	A	В	C	D "	Second'	,IF(AND)(K4>=4	0,K4<5	0),"Thir	d","Fail"))))				
1							100								
2	1 - 38														
3		RNO	MOB	ME	AFM	MM	SFM	BL	П	TOT	AVG	GRAD	MAX	MIN	
4		1	65	98	65	87	54	64	84	517	73.9	Distinction			
5		2	54	80	84	73	91	62	41	485	69.3				
6		3	55	62	69	76	83	54	46	445	63.6				
7		4	56	44	85	79	67	55	51	437	62.4				
8	10-10	5	57	46	53	82	40	56	56	390	55.7	44 - 24 22 - 23			
7 8		4	56 57	44	85 53	79	67 40	55	51 56	437 390	62.4 55.7				

9. Drag down the result to copy formula on to other rows

10. Similarly select cell M4 and calculate maximum marks as

=MAX (C4,D4,E4,F4,G4,H4,I4) or =MAX(C4:I4)

2	M	4	.	f _x =	MAX(C4	:14)								-3-34
	A	В	C	D	E	F	G	H	1	J	К	L	M	N
1									0.1					
2	1-13													
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	TOT	AVG	GRAD	MAX	MIN
4		1	65	98	65	87	54	64	84	517	73.9	Distinction	98	8
5		2	54	80	84	73	91	62	41	485	69.3	First		
6		3	55	62	69	76	83	54	46	445	63.6	First		
7		4	56	44	85	79	67	55	51	437	62.4	First		
8		5	57	46	53	82	40	56	56	390	55.7	Second		

11. Drag down the result to copy function on to other rows

12. Similarly select cell N4 and calculate minimum marks as

=MIN (C4,D4,E4,F4,G4,H4,I4) or =MIN(C4:I4)

2	N	4	-	<i>f</i> _x =	MIN(C4:	.14)								
	A	В	C	D	E	F	G	Н	1	J	К	L	M	N
1	~								0.3					
2	1-38					_				_				
3		RNO	MOB	ME	AFM	MM	SFM	BL	IT	TOT	AVG	GRAD	MAX	MIN
4		1	65	98	65	87	54	64	84	517	73.9	Distinction	98	54
5		2	54	80	84	73	91	62	41	485	69.3	First	91	
6		3	55	62	69	76	83	54	46	445	63.6	First	83	
7		4	56	44	85	79	67	55	51	437	62.4	First	85	
8		5	57	46	53	82	40	56	56	390	55.7	Second	82	1

13. Drag down the result to copy function on to other rows

14. To add title to it, select cells B1 through N1 and click on **Merge and Center** button from formatting toolbar, Type PROGRESS REPORT, bold the font and increase the font size, the final report can be saved to disk or printed.

	A	В	C	D	E	F	G	H	1	J	-K	L	M	N
1						Ρ	ROG	RESS	REP	ORT				
2														
3	F	RNO	MOB	ME	AFM	MM	SFM	BL	П	TOT	AVG	GRAD	MAX	MIN
4		1	65	98	65	87	54	64	84	517	73.9	Distinction	98	54
5		2	54	80	84	73	91	62	41	485	69.3	First	91	41
6		3	55	62	69	76	83	54	46	445	63.6	First	83	46
7		4	56	44	85	79	67	55	51	437	62.4	First	85	44
8		5	57	46	53	82	40	56	56	390	55.7	Second	82	40

13. Calculate the mean, median, and mode from the following data of marks obtained by 10 students. Also demonstrate how to transpose rows into columns.

S. No.:	1	2	3	4	5	6	7	8	9	10
Marks:	15	32	29	17	32	32	25	29	20	35

- 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
- 2. Design the table with given data for SNo and Marks in horizontal format.



Move data between rows and columns

3. COPY the table data by selecting the table.



4. Before you paste the copied data, right-click your destination cells and then click **Paste Special**.



In the Paste Special dialog box, select Transpose, and then click OK.
 You'll find the Transpose check box in the lower-right corner of the dialog box:

Paste Special	? 🛛
Paste	
 All 	🔘 Validatio <u>n</u>
🔘 <u>F</u> ormulas	All except borders
O ⊻alues	🔘 Column <u>w</u> idths
🔘 Forma <u>t</u> s	Formulas and number formats
○ <u>C</u> omments	Values and number formats
Operation	
💿 N <u>o</u> ne	O <u>M</u> ultiply
🔘 A <u>d</u> d	🔘 Dįvide
🔘 <u>S</u> ubtract	
📃 Skip <u>b</u> lanks	Transpos <u>e</u>
Paste Link	OK Cancel

Excel pastes the data in vertical format.

SNo		Mark	s
	1	1:	5
	2	3	2
	3	2	9
	4	1	7
	5	3	2
	6	3	2
	7	2	5
	8	2	9
	9	2	D
1	10	3	5

6. Design the table in the following way:

0	A	B	C	D
1				
2				
3		SNo.	Marks	
4		1	15	
5		2	32	
6		3	29	
7		4	17	
8		5	32	
9		6	32	
10		7	25	
11		8	29	
12		9	20	
13		10	35	
14				-
15		Mean		
16		Median		
17		Mode		

 Calculate Mean in cell C15 as =AVERAGE(C4:C13)

	C15	- <i>f</i>	=AVERA	GE(C4:C13)
	A	В	C	D
1	100000			
2				
3		SNo.	Marks	
4		1	15	
5		2	32	
6		3	29	
7		4	17	
8		5	32	
9		6	32	
10		7	25	
11		8	29	
12		9	20	
13		10	35	
14				
15		Mean	26.6	
16		Median		
17		Mode		

Calculate Median in cell C16 as =MEDIAN(C4:C13)

	C16	• 7	I(C4:C13)	
	A	В	С	D
1				
2				
3		SNo.	Marks	
4		1	15	
5		2	32	
6		3	29	
7		4	17	
8		5	32	
9		6	32	
10		7	25	
11		8	29	
12		9	20	
13		10	35	
14		l		
15		Mean	26.6	
16		Median	29	
17		Mode		

9. Calculate Mode in cell C17 as =MODE(C4:C13)

	C17	• <i>†</i>	S =MODE(C4:C13)
	A	В	C	D
1	20080	1		
2				
3		SNo.	Marks	
4		1	15	
5		2	32	
6		3	29	
7		4	17	
8		5	32	
9		6	32	
10		7	25	
11		8	29	
12		9	20	
13		10	35	
14		1	1	
15		Mean	26.6	
16		Median	29	
17		Mode	32	
18				

- 13. Taj wants to start a business. He estimated that it will cost him Rs. 3,75, 000 to start the business and expects to earn a net income of Rs. 75,000, Rs. 1,02,500, Rs. 90,000, Rs. 62,500, Rs. 1,20,000, and Rs. 1,22,500 respectively, in the first six months. Calculate the Internal Rate of Return (IRR)
 - 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
 - 2. Design the worksheet as follows:

	A	В	C	D
1				
2			Taj & As	sociates
3				
4			Investment Goal	-Rs.375,000.00
5			1st Month	Rs.75,000.00
6			2nd Month	Rs.102,500.00
7			3rd Month	Rs.90,000.00
8			4th Month	Rs.62,500.00
9			5th Month	Rs.120,000.00
10			6th Month	Rs.122,500.00
11			Guess	
12		Interr	al Rate of Return	

Function Internal Rate of Return, IRR (values, guess)

- 3. Click cell D12 and type =IRR(
- 4. Select cells D4:D10 and, on the Formula Bar, click the Enter button 🗹

	D12	-	f∗ =IRR(D4	:D10)
	A	В	C	D
1		1100		
2			Taj & As	sociates
3				
4	î.		Investment Goal	-Rs.375,000.00
5			1st Month	Rs.75,000.00
6			2nd Month	Rs.102,500.00
7			3rd Month	Rs.90,000.00
8			4th Month	Rs.62,500.00
9			5th Month	Rs.120,000.00
10			6th Month	Rs.122,500.00
11			Guess	
12	1	Intern	al Rate of Return	12.67%
13	8 (P		50	2

5. Right-Click on Cell D12, go to Format cell and select **Percentage** in **Category** list box.

umber Alignment	Font	Border	Patterns	Protection
ategory: Seneral Jumber Currency Accounting Date Time Percentage Fraction Scientific Text Special Custom	Decin	ell value by	2 100 and disp	lays the result w
ercentage formats multi percent symbol.	iply the ce	ell value by	100 and disp	lays the re

- 6. In cell D11, type **12** and click cell D12
- In the Formula Bar, change the function to =IRR(D4:D10, D11) and press Enter (you shouldn't need any significant difference unless you change the range of cells such as D4:D8)
- 8. Save the workbook
- 14. A motorcar is purchased for Rs. 8, 12, 500 that has a life of 5 years and salvage value of Rs. 1, 25, 000. Calculate depreciation by straight line method. (Use SLN financial function).
 - 1. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
 - 2. Design the worksheet as follows:

0	A	B	C
1			
2		Rent Me	Center
3			
4		Cost	812500
5		Salvage	125000
6		Life(Years)	5
7		Depreciation	
8			

3. Click cell C7 and, on the main menu, click Insert -> Function...

4. In the Paste Function dialog box, in the Function Category list, click Financial. In the Function Name list, double-click SLN.

Insert Function		? 🗙
Search for a function:		
Type a brief descripti click Go	on of what you want to do and then	<u>Go</u>
Or select a <u>c</u> ategory:	Financial 🛛 😽	
Select a functio <u>n</u> :		
PMT PPMT PV RATE		~
SLN SYD VDB		
SLN(cost,salvage,li Returns the straight-li	fe) ne depreciation of an asset for one pe	riod.
Help on this function	ОК	Cancel

- 5. Move the SLN window so you can see the values on the worksheet.
- 6. Click the box to the right of Cost and, on the worksheet, click cell C4
- 7. In the SLN window, click the box to the right of Salvage and, on the worksheet, click cell C5
- 8. In the SLN window, click the box to the right of Life and, on the worksheet, click cell C6

	A	B		C	D	E	F	G
1								0
2		Re	nt Me	Center				
3								
4		Cost		812500				
5		Salvage	8	125000				
6		Life(Yea	ars)	5		1		1
7		Depreci	ation V(C	4,C5,C6) [
8	-							
9	Functi	on Argum	ents					\mathbf{X}
10	CI NI							
11	DLIN		Dec.					
12		Cost C4				= 812	500	
13		Salvage	C5			= 125	000	
14		Life	C6			5 = 5		
15						<u></u>		
16						= 137	500	
17	Returns	s the straigh	t-line depre	ciation of an asse	t for one j	period.		
18								
19		Life	ic the numb	or of poriods out	r which th	o proteir boing	n depreciated	e -
20		LIE	(sometimes	; called the useful	life of the	asset).	g uepreciaceu	5
21			0					
22	Formula	a result =	Rs.	137,500.00				
24	Help on	this function	1			ОК	Ca	ncel
25						-		

9. Click OK

	C7	▼ fx	=SLN(C4,C5,C6)
	A	В	С
1			
2		Rent M	fe Center
3			
4		Cost	812500
5		Salvage	125000
6		Life(Years)	5
7		Depreciation	Rs.137,500.00
8			2. 2. C
9			

- 15. Tenley Investments has got investments of Rs. 7, 25, 000 and has a lifetime of 10 years. The salvage value of the investment is Rs. 67, 500. Using DDB function; calculate depreciation over the life of the investment for first two months.
 - 10. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Excel 2003.
 - 11. This will start a new workbook then fill up Sheet as follows:

	A	B	C	D
1				
2		Tenley Inve	stments	
3				
4		Cost	725000	
5		Salvage	67500	
6		Life	120	
7		Period	2	
8		Depreciation		
9				

- 12. Click cell C8 and, on the main menu, click Insert -> Function...
- 13. In the Paste Function dialog box, in the Function Category list, click Financial. In the Function Name list, double-click DDB.

Insert Function		? 🛛
Search for a function:		
Type a brief descripti click Go	on of what you want to do and the	n <u>G</u> o
Or select a <u>c</u> ategory:	Financial	~
Select a functio <u>n</u> :		
DB DDB FV IPMT IRR ISPMT MIRR DDB(cost,salvage,	ife,period,factor)	
Returns the depreciat double-declining balan	ion of an asset for a specified period ce method or some other method y	od using the vou specify.
Help on this function	OK	Cancel

	DDB 🗸 🗙	/ 👧 =DDB(C4,C5,	DDB(C4,C5,C6,C7,2)				
	A B	С	D	E	F	G	
1				-			
2	Tenle	y Investments					
3							
4	Cost	725000					
5	Salvage	67500					
6	Life	120					
7	Period	2					
8	Deprecia	ation 5,C6,C7,2)	-				
9	(a second						
10	Function Argum	ents					
11	DDB					1	
12	Cost	C4		(1) = 7	25000		
13							
14	Salvage	C5		<u> </u>	57500		
15	Life	C6		1 = 1	.20		
10	Period	C7		N = 2	2		
10	Eactor	2			,		
10		6					
20	-			= 1	1881.94444		
20	Returns the depreci	ation of an asset for a :	specified peri	od using the d	ouble-declinir	ng balance	
22	method or some oth	er method you specify.					
23							
24	Factor	is the rate at which the assumed to be 2 (the d	ouble-declinir	nes. If Factor	is omittea, it thod).	IS	
25			capie section	ig balance me			
26	Formula result =	11881.94444					
27				_			
28	Help on this function	1			K L	Cancel	

14. Move the DDB window so you can see the values on the worksheet

- 15. In the DDB window, Click the box to the right of Cost and, on the worksheet, click cell C4
- 16. Click the box to the right of Salvage and, on the worksheet, click cell C5
- 17. In the DDB window, click the box to the right of Life and, on the worksheet, click cell C6
- 18. Click the box to the right of Period and, on the worksheet, click cell C7
- 19. In the DDB window, click the box to the right of Factor and type 2 (because doubledeclining method always takes 2 as factor even if omitted). Click OK

	C8	▼ fx	=DDB(C4,C5,CB	i,C7,2)
	A	В	C	D
1				
2		Tenley L	ivestments	
3		10	P P	
4		Cost	725000	
5		Salvage	67500	
6		Life	120	
7		Period	2	
8		Depreciation	Rs.11,881.94	

Microsoft Access

16. Create a database called "dbStudent" and create three tables with names tblStudent, tblCourse, and tblStudentCourse respectively with the following details:

Table: tblCourse		
Data Type		
Number		
Text		
Number		
Memo		

Table: tblStudent		
Field Name	Data	
	Туре	
Ê	Number	
StudentID		
SName	Text	
GPA	Number	

Table: tblStudentCourse		
Field Name	Data Type	
🛿 StudentID	Number	
CourseID	Number	
DateTaken	Date/Time	
Seat	Text	

- 1. First, you need to create a directory in My Document with name "database"
- 2. Click MS Access icon from Start menu or on your desktop.



3. Select Blank database from right panel.



4. Find the directory you just created and type the database name, say "dbStudent" in this case, and then click "Create" button.



To create tblCourse in Design View:

5. Double-Click on Create table in Design view

🗉 dbStudent : Database (Access 2000 file format)				
🚰 Open 🕍 Desig	n 🛅 <u>N</u> ew 🗙 🟪 📅 🔠			
Objects	Create table in Design view			
🔲 Tables	Create table by using wizard			
📑 Queries	Create table by ertering data			
😑 Forms				
🗐 Reports				
🗎 Pages				
🔁 Macros				
🚵 Modules				
Groups				
📷 Favorites				

6. Design the table with the given FieldName and DataType.

🔲 Table1 : Table			×
Field Name	Data Type	Description	~
CourseID	Number		E
CourseTitle	Text		
Credit-Iour	Number		
Description	Memo		-
			_
			~
	Field (Propertes	
General Lookup Field Size Lor Format Decimal Places Decimal Places Au Input Mask Caption Caption Default Value O Validation Rule No Validation Text Required No Indexed Ye Smart Tags No	ng Intogor to s (Duplicates OK)	A field name can be up to 64 characters long, includng spaces. Press FL for help on field names.	

7. Right-click on the CourseID. Set it as Primary Key.

E	🔲 Table1 : Table 📃 🗖 🔀				
		Field Name	Data Type	Description	^
		Diama Kan	Number		
L	¥	Primary <u>K</u> ey	Text		
┢	×	Cuț	Memo		-
	Ca l	⊆ору			
F	E.	<u>P</u> aste	Field	d Properties	
ſ	3⊷	Insert Rows			-
	⊒-	<u>D</u> elete Rows	Long Integer		
	<u>.</u> ^	<u>B</u> uild	Auto	A field name	
	P	<u>P</u> roperties		can be up to 64 characters	
	Default Value 0 lcng, including Validation Rule including spaces. Validation Text No Press F1 for Indexed Yes (Duplicates OK) names.				

8. Save the table with tblCourse name.

	🗉 Table1 : Table 📃 🗖 🔀					
	Field Name		Data Type	Description	~	
8	CourseID		Number			
	CourseTitle		Text			
►	CreditHour		Number	umber		
	Description		Memo			
Description Memo Save As ? X General Look Table Name: U OK Field Size Cancel Frimat Cancel Decimal Places Cancel Input Mask General Look Caption Befault Value Validation Rule U Validation Text Nn		is t eed is cu				
	Indexed Smart Tags			field on a form. Pres F1 for help o descriptions	s on s,	

9. Close the window. Observe tblCourse table is created in dbStudent database.



10. Double-click on the tblCourse to fill the table with sample data.

	🎟 tblCourse : Table 📃 🗖 🔀			
	CourselD	CourseTitle	CreditHour	Description
	1	MBA(HR)	4	Masters of Business Administra
	2	MBA(IT)	3	Masters of Business Administra
	3	MBA(Finance)	5	Masters of Business Administra
	4	MBA(Marketing)	4	Masters of Business Administra
*	0		0	
Re	cord: 🚺 🔳 🔽		• 米 of 4	

To create tblStudent using Wizard:

11. Double-Click on Create table by using wizard.

💷 dbSludent : Database (Access 2000 file format)			
🚰 Open 🕍 Desig	n 🛅 New 🗙 🖭 🤃 🧱 🏢		
Objects	2 Create table in Design view		
Tables	Create table by using wizard		
🗗 Queries	Create table by entering data		
🔳 Forms	III tblCourse		
🗐 Reports			
🗎 Pages			
📿 Macros			
💐 Modules			
Groups			
💽 Favorites			

- 12. TableWizard window appears. Make sure Business option is selected.
- 13. Choose **Students** from **Sample Tables** list box.

Table Wizard				
Which of the sample tables li	Which of the sample tables listed below do you want to use to create your table?			
After selecting a table category, choose the sample table and sample fields you want to include in your new table. Your table can include fields from more than one sample table. If you're not sure about a field, go ahead and include it. It's easy to delete a field later.				
💿 Bu <u>s</u> iness	S <u>a</u> mple Fields:		Fields in my new tabe:	
O <u>P</u> ersonal	MiddleName LastName	<u>></u>	StudentIC FirstName	
Sample <u>T</u> ables:	ParentsVames	>>	PhoneNumber	
Service Records	City			
Tasks	StateOrProvince PostalCode			
EmployeesAndTasks	PhoneNumber			
Students And Classes	EmailName Maior	~	<u>R</u> ename Field	
	Cancel	Back	vext > Einish	

14. Select StudentID, FirstName and PhoneNumber from Sample Fileds list box using button. Renam FirstName to SName and PhoneNumber to GPA

Table Wizard			
Which cf the sample tables isted below do you want to use to create your table?			
After selecting a table category, choose the sample table and sample fields you want to include in your new table. Your table can include fields from more than one sample table. If you're not sure about a field, go aheac and include it. It's easy to deete a fielc later.			
OBusness	Sample Fields:	Fields in <u>my</u> new table:	
OBersonal	Address City	StudentID SName	
Sample <u>T</u> ables:	StateOrProvince PostalCode	>> GPA	
Service Records Transactions Tasks EmployeesAndTasks Students Students V	PhoneNumber EmailName Major StudentNumber Notes	< (Rerame Field)	
	Cancel < Bac	tk <u>N</u> ext > <u>F</u> irish	

15. Give table name as "tblStudent" and make sure "Yes, set a primary key for me." option is selected.



16. In the next step, Click on Next button.

Table Wizard	
Is your new table related to a records. Usually, your new ta	ny other tables in your database? Related tables have matching ble is related to at least one other table in the current database.
In some cases, the wizard will new table is related to existing list and click Relationshps.	create table relationships for you. The list below shows how your gitables. To change how a table is related, select a table in the
	My new 'tblStudent' table is
	<u>R</u> elationships
	Cancel < <u>B</u> ack <u>N</u> ext > <u>F</u> inish

17. In the next step, "Enter data directly into the table." Select Finish.

Table Wizard			
	That's all the information the wizard needs to create your table.		
	After the wizard creates the table, what do you want to do?		
	O Modify the table design.		
	💿 Enter Jata <u>directly into the table.</u>		
1	Enter data into the table using a form the wizard creates for me.		
	Display Help on working with the table.		
	Cancel < <u>B</u> ack Next > <u>Finsh</u>		

18. Start entering sample data

	🔲 tblStudent : Table 📃 🗖 🗙				
	Student ID	SName		GPA	
	1	Perkins	4		
	2	Jones	3		
	3	Vandy	4.5		
I	4	Long	3.6		
*	(AutoNumber)				
Re	cord: 🚺 🔳	4 🕨 🕨	•	of 4	

To create tblStudentCourse by entering data:

19. Double-click on the Create table by entering data.

🖆 dbStudent : Database (Access 2000 file format)								
🚰 Open 🕍 Design 🛅 New 🗙 🖭 📰 🏢								
Objects	Create table in Design view							
🔲 Tables	Create table by using wizard							
🗐 Queries	Create table by entering data							
🔳 Forms	tblCourse tblStudent							
🗐 Reports								
🛅 Pages								
💈 Macros								
all Modules 💐								
Groups								
😹 Favorites								

20. A new window appears; right-click on the fields and select Rename Column option to rename the fields.

I	🔲 Table1 : Table 📃 🗖 🔀					
	Field1	Eiold0 E	ield3	Field4	Field5	~
\mathbf{F}	Ź.	Sort <u>A</u> scending				
	ZA	Sort <u>D</u> escending				
		⊆ору				
		<u>P</u> aste				_ =
	**	⊆olumn Width…				
		<u>H</u> ide Columns				
-		Freeze Columns				- 1
		Unfreeze <u>A</u> ll Columns				
_	#8	Eind				- 1
-		Insert <u>⊂</u> olumn	1			-
		Lookup Column				
	Ψ	Delete Colu <u>m</u> n				
		Re <u>n</u> ame Column				_
Rec	ord: 🖪 🖉		f 21	<		>

21. Rename all the fields as given. Make sure you are not filling the table with any data.

Ħ	Table1 : Table			
	StudentID	CourseID	DateTaken	Seat 🔼
◄				
Re	cord: 🚺 🔳		街 of 21	

22. Save it with tblStudentCourse name.

Save As	? 🛛
Table Name:	ОК
	Cancel

23. Right-click on tblStudentCourse and select design view.



24. Change the data types as given in the question. In data and time data type. Select Format as Medium Date.

🔲 tblStudentCourse : Table					
	Field Name	Data Type Description		~	
	StudentID	Number			
	CourseID	Number			
►	DateTaken	Date/Time 🛛 💙			
	Seat	Text			
				~	
	•	Field F	Propertes		
	General Lookup Format Me Input Mask Caption Default Value Validation Rule Validation Text Required No Indexed No IME Mode No Gmart Tags	dium Date	The dat type determine the kind values the users ra- store in the field. Pro- F1 for hell data type	ta of nat an the ess p on ues,	
25. Close above window, you'll again be seeing window shown below.

👼 dbStudent : 🛙	🗉 dbStudent : Database (Access 2000 file format)							
🚰 Open 🕍 Desig	🛱 Open 🔽 Design 🔚 New 🗙 🧤 😳 🧱 🏢							
Objects	Create table in Design view							
🔲 Tables	Create table by using wizard							
🗐 Queries	Create table by entering data							
E Forms	tblCourse							
Reports								
Pages								
📿 Macros								
💐 Mocules								
Groups								
📓 Favorites								

26. Double-click on the tblStudentCourse and start entering sample data

	🗉 tb StudentCourse : Table							
	StudentID	CourselD	DateTaken	Seat				
	1	3	08-Aug-10	Management				
	2	3	14-Jul-10	Government				
	3	4	20-Aug-10	Government				
	4	1	30-Jul-10	Government				
*	0	0						
Re	cord: 🚺 🔍	1 🕨 🕨	▶¥ of 4					

Aicrosoft Acces	s					
Edit View	Insert Format F	<u>R</u> ecords <u>T</u> ools <u>N</u>	<u>M</u> indow <u>H</u> elp		Type a question for help	
K-IB 818	1 🖪 🌮 X 🖻	119 81	21 X1 V 🖄	7 4 >	× 🗇 🚈 • 🎯 🖕	
🔲 tblStudentCou	rse : Table					
StudentID	CourselD	DateTaken	Seat		~	L
•	3	08-Aug-10	Management			н
	2 3	14-Jul-10	Government			н
	3 4	20-Aug-10	Government			L
1	1 1	30-Jul-10	Government		~	L
Record: 14		▶ * of 4				L
🔳 tblStudent : Ta	able					
Student ID	SName	GPA			~	
•	l Perkins	4				
2	2 Jones	3				Ш
	3 Vandy	4.5				Ш
	1 Long	3.6			×	
Record: I		▶ 米 of 4				Ш
🗉 tblCourse : Tal	ole					
CourselD	CourseTitle	CreditHour	Des	cription	~	
▶ 1	MBA(HR)		4 Masters of Bu:	siness Adminis	stra	
2	2 MBA(IT)		3 Masters of Bu:	siness Adminis	stra	1
3 MBA(Finance)			5 Masters of Bu	siness Adminis	stra	
4 MBA(Marketing) 4 Masters of Business Administra						
Record: I		▶ * of 4				
					1 (Januar) (J	
Datasheet View					NUM	

Three tables are created with three different methods in Access.

17. Create a database dbEmployee and create tables tblEmployee and tblDepartment.

- Build Relationships between tblEmployee and tblDepartment.
- Create a report on tblEmployee.

Table: tblEmployee		Table: tblDepartment	
Field Name	Data Type	Field Name	Data Type
P EmployeeID	Number	DepartmentID	Number
EName	Text	DepartmentName	Text
Designation	Text	Description	Memo
Salary	Number		
DepartmentID	Number		

1. First, you need to create a directory in My Document with name "database"

2. Click MS Access icon from Start menu or on your desktop.

D M	icrosoft Access		
Eile	Edit View Insert	Tools <u>W</u> indow <u>H</u> elp	Type a question for help 👻
10	New Ctrl+N	▘▎▓▝▙▌▝▎▖▋▖▏▓▖▏▓▝▓▝▟▝▌?▌♥	
	Open Ctrl+O		Getting Started 🔹 💌 🗙
	<u>G</u> et External Data 🔰 🕨		6 6 6
	Close		Nermath
	Save Ctrl+S		Cifice Online
	Save <u>A</u> s		Connect to Microsoft Office
	Export		Online
1	File Searc <u>h</u>		 Get the latest news about using Access
	Web Page Preview		 Automatically update this list
	Page Setyp		More
0	Print Pre <u>v</u> iew		Search for:
e	Print Ctrl+P		
	Send To		Example: "Print more than one copy"
	<u>1</u> db1.mdb		Open
	E <u>x</u> it		db1 mdb
			More
			Create a new file
Read	ly		NUM

3. Select Blank database from right panel.



4. Find the directory you just created and type the database name, say "dbStudent" in this case, and then click "Create" button.

File New Data	oase			
Save in:	🛅 Database	v 📀 - 🖄	Q X 🖬 🛛	🛛 🔻 Tools 🕶
My Recent Documents	dbStudent.	mdb		
Desktop				
My Documents				
My Computer				
	File <u>n</u> ame:	dbEmployee.mdb	~	<u>Create</u>
Places	Save as <u>t</u> ype:	Microsoft Office Access Database (*.mdb)	~	Cancel

To create tblEmployee in Design View:

5. Double-Click on Create table in Design view

📠 dbEmployee :	🖬 dbEmployee : Database (Access 2000 file format)							
🞼 Open 🕍 Desig	🔓 Open 🕍 Design 🔚 Yew 🗙 🗠 🐎 🔛 🏢							
Cbjects	Create table in Design view							
🔲 Tables	Create table by using wizard							
📑 Queries	Create table by entering data							
🗐 Forms								
🗐 Reports								
🗎 Pages								
📿 Macros								
💸 Modules								
Groups								
😹 Favorites								

- 6. Design the table with the given FieldName and DataType.
- 7. Right-click on the EmployeeID. Set it as Primary Key.

8. Save the table with tblEmployee name.

	tblEmp	ployee : Table				×
	Field Name		Data Type Description			
₽•	Employe	eID	Number			T
	EName		Text			
	Designat	ion	Text			
	Salary		Number			
	Departm	entID	Number			
			E:-LJ			-
-			Field	Properdes		_
	Seneral	Lookur				
	ield Size	Lor	ng Integer			
	ormat					
	Jecimai Pi	aces Au	10			
	nput Mas	к			A field name	
	зарион Хабашыла				64 characters	
L L	zeli dulu va Zalidatian	nue v			long incuding	
	aliuauun Alidatien	Toyt			spaces. Press	
	Validation Text				F1 for help on	
l i	Indexec Ve		(No Duplicates)		field names.	
	maexee Smart Tag	10. IC	(No Dapicaces)			
-	andre rug					

9. Close the window. Observe tblEmployee table is created in dbEmployee database.

률 dbEmployee :	🖬 dbEmployee : Database (Access 2000 file format)						
宿 Open <u> D</u> esig	n 🛅 New 🗙 🖳 🐩 🧱 🏢						
Objects	Create table in Design view						
🔲 Tables	Create table by using wizard						
 Queries Forms Reports Pages Marros 	Create table by entering data						
K Modules							
瀫 Favorites							

10. Double-click on the tblEmployee to fill the table with sample data.

	🖬 tblEmpløyee : Table						
	EmployeeID	EName	Designation	Salary	DepartmentID		
►	100	Edward	Manager	40000	3		
	101	Michelle	Supervisor	20000	5		
	102	Annie	General Manager	50000	2		
	103	Doe	Clerk	10000	1		
	104	Mark	Manager	15000	4		
*	U			U	U		
Re	cord: 1	1	NDD S				

To create tblDepartment in using Wizard:

11. Double-Click on Create table in Design view

률 dbEmployee :	🗖 dbEmployee : Database (Access 2000 file format)							
🚰 Open 🕍 Desig	n 🔚 New 🗙 🖭 🤃 🔛 🏢							
Objects	Create table in Design view							
🔲 Tables	Create table by using wizard							
🗐 Queries	Create table by entering data							
🛅 Forms	III tblEnployee							
🗐 Reports								
🛅 Pages								
💈 Macros								
argent Modules 🕺								
Groups								
😹 Favcrites								

- 12. Design the table with the given FieldName and DataType for second table.
- 13. Right-click on the DepartmentID. Set it as Primary Key.

14. 5	Save	the	table	with	tblDepartment name.
-------	------	-----	-------	------	---------------------

	🗉 tblDepartment : Table 📃 🗖 🔀				
	Field Name	Data Type	Description	~	
8	DepartmentID	Number			
	DepartmentName	Text			
	Description	Memo			
_			Pure aution	`	
_		Field	Properties		
	General Lookup				
F	Field Size	na (nteaer			
Ē	Format				
	Decimal Places Au	to			
1	input Mask		A fiel	ld name	
	Caption		can b	be up to	
1	Default Value 0		64 ch	aracters	
1	/alidation Rule		long, i	including	
1	/alidation Text		Space Et for	s, Press r beln on	
F	Required No	- (N - D k	field	neip on nemes.	
	ndexed Ye	s (No Duplicates)			
	omarciags				

15. Close the window. Observe tblDepartment table is created in dbEmployee database.

💷 dbEmployee : Database (Access 2000 file format) 🛛 🔲 🗖 🔀					
🚰 Open 📈 Desig	n 🛅 Yew 🗙 🟪 📰 🧱				
Objects	Create table in Design view				
🔲 Tables	Create table by using wizard				
📴 Queries	Create table by entering data				
🔁 Forms	i tblEmplovee				
🗐 Reports					
🗎 Pages					
📿 Macros					
🖧 Modules					
Groups					
😹 Favorites					

DepartmentID DepartmentName Description ▲ 1 Finance Accounting and Finance 2 Marketing Marketing and Promotion 3 Production Production and Manufactring 4 Sales Sales Management 5 R&D Research and Development ★ 0 Image: Sales Sale	🗉 tblDepartment : Table					
 1 Finance 2 Marketing 3 Production 4 Sales 5 R&D 8 Research and Development 		DepartmentID	DepartmentName	Description		
2 Marketing Marketing and Promotion 3 Production Production and Manufactring 4 Sales Sales Management 5 R&D Research and Development * 0	►	1	Finance	Accounting and Finance		
3 Production Production and Manufactring 4 Sales Sales Manacement 5 R&D Research and Development * 0		2	Marketing	Marketing and Promction		
4 Sales Sales Manaçement 5 R&D Research and Development ★ 0		3	Production	Production and Manufactring		
5 R&D Research and Development * 0		4	Sales	Sales Manaçement		
		5	R&D	Research and Development		
	*	0				

16. Double-click on the tblDepartment to fill the table with sample data.

To Build Relationships between tblEmployee and tblDepartment:

We can establish relationships between two or more tables by associating common fields. In the dbEmployee database, the DepartmentID is a common filed in both tables. It is the primary filed in tbIDepartment table. To establish relationships between the DepartmentID fields in the tbIEmployee and tbIDepartment, proceed as follows:

- 17. Use the Tools->Relationships menu option to display the **Show Table** dialog box. Once displayed,
 - a. select tblDepartment and Click Add
 - b. select tblEmployee and Click Add

Show Table	? 🛛	Show Table	? 🛛
Tables Queries Both tblDepartment tblEmployee	Add Close	Tables Queries Both tblDepartment tblEmployee	Add

- 18. Close the Show Table dialog box.
- 19. Now drag the table boxes so they are positioned approximately as shown in the following illustration.
- 20. Establish the join lines (relationships) by selecting DepartmentID in the tblEmployee box and draggin to tblDepartment box and release the mouse button.

📲 Relationships	
tblEmployee Employee LName Designation Salary DepertmentID	t b IDe partment Department Department Name Description
< (III)	×

21. Edit Relationships dialog box appears. Make sure that DepartmentID is selected in both the boxes in Edit Relatiobsips dialog box and click **Create** button.

dit Relationsh	iips		?
Table/Query:		Related Table/Quer	ry: Create
tblDepartment	Y	tblEmployee	
DepartmentID	V	DepartmentID	Cancel
			Join Type.
			Create New
Enforce Refe	renti	al Integrity	
Cascade Upd	erenti. late R	al Integrity telated Fields	
Cascade Upo	iate F ete Ri	al Integrity Related Fields elated Records	

22. Verify that your join lines resemble those shown in the illustration below. The **Close** and click **Yes** to save the relationships.

📲 Relationship	ps		X
tbl	lEmployee		
Emp ENa Des Sala Dep	ployeeID ame signation ary partmentID		
		tblDepartment DepartmentID DepartmentName Description	
<			~

To Create a report on tblEmployee:

23. In the Database window, click Reports under Objects.

💷 dbEmployee : Database (Access 2000 file format)						
🛕 Preview 🕍 De	🗋 Preview 🕍 Design 資 New 🗙 🏪 😳 🧱 🏢					
Objects	Create report in Design view					
Tables	Create report by using wizard					
🗐 Queries						
📴 Forms						
Reports						
🗎 Pages						
📿 Macros						
area Modules 🕺						
Groups						
📓 Favorites						

24. Click the New button on the Database window toolbar.



In the New Report dialog box you can see six ways to create reports in Microsoft Access:				
Design View	Begins with blank page. You lay out the report the way you want using the design tools in the toolbox.			
Report Wizard	Choice of fields, sort criteria, & report layout used. Creates tabular or columnar report.			
Columnar AutoRepor	t One or more records displayed vertically. Selected from a single table or query. Each field appears on a separate line with a label to its left.			
Tabular AutoReport	Rows and columns grouped by field values. Selected from a single table or query. The fields in each record appear on one line, & the labels print once at the top of each page.			
Chart Wizard	Leads you through creation of a report containing a chart and associated data.			
Label Wizard	Helps you create mailing labels from data.			
If you clicked Rep directions in the v	 If you clicked Report Wizard, Chart Wizard, or Label Wizard then you can follow the directions in the wizard dialog boxes. 			

- If you click **AutoReport: Tabular** or **AutoReport: Columnar,** MS Access automatically creates your report.
- If the resulting report doesn't look the way you want, you can change it in **Design View**.

25. Select the **AutoReport: Tabular** and select the table **tblEmployee** from box given below. Remember AutoReport displays all the fields & records in the underlying table or query.

New Report	? 🛛
This wizard automatically creates a tabular report.	Design View Report Wizard AutoReport: Columnar AutoReport: Tabular Chart Wizard Label Wizard
Choose the table or query where the object's data comes from:	tblEmplcyee

26. Click OK. tblEmployee report is generated as follows:

🔎 Microsoft Acce	ess - [tblEmployee]			
Eile Edit V	iew <u>T</u> ools <u>W</u> indow	Help	Type a question for	help 🔽 🗕 🗗 🗙
🔣 • 🕘 I Q 🗖	100%	✓ Close Setup	🖉 • 📑 📩 •	0
				^
thEumlo	1100			
ioiLingio	yee			
Employagin EN	James	Desimetion	Salam D	mustmant ID
Linghoyee11) 11	vame	Designation	Stata y LA	eparment
100 Edv	Aard	Manager	40000	3
101 Mic	helle	Supervisor	20000	5
102 Anr	nie	General Manager	50000	2
103 Doe	9	Clerk	10000	1
104 Mar	rk	Manager	15000	4
				*
Page: I 🗐	1 🕨 🕅 🔇			>
Ready			N	JUM:

18. Create Employee salary table and give 5 records.

- The salary field cannot accept > 40,000
- Sort Salary field
- Write a query to display the records for salary > 20,000

Table: tblEmp			
Field Name	Data type		
ଞ୍ଚ EmpNo	Number		
EmpName	Text		
Designation	Text		
	Text		
Department			
Salary	Number		

- 1. First, you need to create a directory in My Document with name "database"
- 2. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Access 2003.



3. Select Blank database from right panel.



4. Find the directory you just created and type the database name, say "dbEmployee" in this case, and then click "Create" button.

File New Data	oase					
Save jn:	🛅 Database		💌 🕲 - 🖄	IQ X	📺 🖬 🍷	Tools -
My Recent Documents	dbStudent.	mdb				
Desktop						
My Documents						
My Computer						
	File name:	dbEmployee mdb				Crasha
My Network Places	Save as <u>t</u> ype:	Microsoft Office Access	; Database (*.mdb)	~	Cancel

Create tblEmp in Design View:

5. Double-Click on Create table in Design view

률 dbEmployee :	Database (Access 2000 file format)								
🚰 Quen 🕍 Design 🔚 Yew 🗙 🖕 🐎 🧱 🏢									
Cbjects	Create table in Design view								
🛄 Tables	Create table by using wizard								
📑 Queries	Create table by entering data								
😑 Forms									
🗐 Reports									
🗎 Pages									
🔁 Macros									
💸 Modules									
Groups									
😹 Favorites									

- 6. Design the table with the given FieldName and DataType.
- 7. Right-click on the EmpNo. Set it as Primary Key.
- 8. Save the table with **tblEmp** name.

🔲 tblEmp : Table				×
Field Name		Data Type	Description	~
😵 EmpNo		Number		Ē
EmpName		Text		
Designation		Text		
Department		Text		
Salary		Number		$\mathbf{\mathbf{v}}$
		Field F	Properties	
General Lookup Field Size Format Decimal Places Input Mask Caption Default Value Validation Rule Validation Text Required Indexed Smart Tags	Lon Aut 0 No Yes	ig Integer :0 ; (No Cuplicates)	A field name can be up to 64 characters long, inclucing spaces. Press F1 for help on field names.	

9. Observe that the dbEmployee database contains tblEmp table in the database window.



Salary field cannot accept > 40,000

To restrict fields from accepting a range of values, we can give validations rules in Design View.

10. To restrict Salary field not to accept Salaray more than 40000, click Salary field of tblEmp table, in field propertied, locate Validation Rule and type <= 40000.

	Field Name	Data Type	Description	
8	EmpNo	Number	477923473037569756936404	×
	EmpName	Text		
	Designation	Text		
	Department	Text		
>	Salary	Number		
	4) (72	Field Proper	ties	
-	Distanting and the second s			-
	General Lookup			
h	Field Size	Long Integer		
	Format	- 1884 - 18		
l i	Decimal Places	Auto		
	Input Mask			
	Caption			An expression that
	Default Value	0		can be entered in the
1	Validation Rule	<=40000		field. Press E1 for
	Validation Text			help on validation
1	Required	No		rules.
	Indexed	No		
	Smart Tags			
	Sindie rugs	L		

11. You can fill the table with sample data. If you attempt to give any number greater than 40000, it'll show violation error.

	🖬 tblEmp : Table							
	EmpNo	EmpName	Designation	Departmen:	Salary			
	201	Brown	Salesman	Marketing	15000			
	202	Ancie	Manager	Marketing	25000			
	203	Jersy	Assistant Manager	Sales	20000			
	204	Mike	Salesman	Marketing	15000			
Į.	205	Ancrew	Accountant	Finance	15000			
*	0				0			
Re	Record: II I 5 DID# of 5							

Sort Salary field

12. To sort Salary field, Select the field content, go to Sort-> Sort Ascending (to sort in increasing order of Salary) or Sort Descending. In this example we select Sort Ascending

2	Microsof	t Access								
÷E	jie <u>E</u> dit	<u>V</u> iew Inser	t F <u>o</u> rmat	<u>R</u> ecords	<u>T</u> ools <u>V</u>	Vindow	Help		Type a question for help	•
	2-10		489 X 0	Eilter			•	有义	🐴 🛏 💌 🛅	-
-				<u>S</u> ort			•	A↓	Sort Ascending	~
				Apply	/ Filter/Sort	t		Z↓	Sort Descending	
				<u>R</u> emo	ove Filter/S	iort				
				Save	Record S	Shift+En	iter			
				Refre	es <u>h</u>					
				Data	Entry					
	tblEmp :	Table	i.				-			
	EmpNo	EmpName	Desig	nation	Departr	ment	Salary			
×	201	Brown	Salesman		Marketi	ng	15000]		
	202	Angie	Manager		Marketi	ng	25000			
	203	Jersy	Assistant	Manager	Sales		20000			
	204	Mike	Salesman		Marketi	ng	15000	1		
	205	Andrew	Accountar	nt	Finance	9	15000	1		
*	0	n na standard an standard a The standard and standard an	1007 010	0.94	1		(
										~
Da	atasheet Vie	w							NUM	

Sorted result is displayed in the illustration below:

	🖬 tblEmp : Table							
	EmpNo	EmpName	Designation	Department	Salary			
	205	Andrew	Accountant	Finance	15000			
	204	Mike	Salesman	Marketing	15000			
	201	Brown	Salesman	Marketing	15000			
	203	Jersy	Assistant Manager	Sales	20000			
	202	Angie	Manager	Marketing	25000			
*	0				0			
Re	Record: I							

Write a query to display the records for salary > 20,000

13. In the **Database** window, select Queries under **Objects**:



14. Double click on Create Query in Design View

Select Query window along with Show Table dialog box appears.

15. Select table **tblEmp** and click on **Add** button.

16. Close the Show Table dialog box

📄 Query1 : Select Query			
Field: Table: Sort: Show: Criteria: or:	Show Table Tables Queries Both tblDepartment tblEmp tblEmployee	Add Close	

- 17. In the Select Query window, drag and drop fields of tblEmp table in the Filed row.
- 18. In the Criteria row, select the cell that intersects with Salary. Type >20000, since our query is to display all the records that contain salary >20000,

🗃 tblEmp Query1 : Select Query								
tbli * Empi Desi Depi	Emp Name Ignation artment					× ×		
Field:	EmpNo	EmpName	Designation	Department	Salary			
Table:	tblEmp	tblEmp	tblEmp	tblEmp	tblEmp			
Sort:								
Show:				×		_		
Criteria:					>20000	_		
or:						× *		

19. Save and name the query as tblEmp Query1

20. To run the query, double-click on the **tblEmp Query1**



The result will be displayed on the screen.

ø	tblEmp Q	uery1 : Sele	ect Query	(
	EmpNo	EmpName	Lesignation	Department	Salary
►	202	Angie	Manager	Marketing	25000
*	0				0
Re	cord: 🚺		1 • • • • • • • • • • • • • • • • • • •		

19. Create a database dbBusiness and a table tblBill.

Table: tblBill						
Field Name	Data type					
₽ BillNo	AutoNumber					
ItemNo	Number					
ItemName	Text					
ItemPrice	Number					
Quantity	Number					
Total	Number					

- Create Query to calculate Total
- Create a Form using tblBill table.
- Create Macro to Open Form to Fill data in Table.
- 1. First, you need to create a directory in My Document with name "database"
- 2. Click on the Start button, point to Programs, followed by Microsoft Office and click on Microsoft Office Access 2003.



3. Select Blank database from right panel.



4. Find the directory you just created and type the database name, say "dbBusiness" in this case, and then click "Create" button.

File New Data	oase					
Save in:	🛅 Database	í.	~	③ - ②	To	ioļs -
My Recent Documents	đbEmploye đdbStudent.	∍.mdb mdb				
My Documents						
My Computer						
Mu Network	File <u>n</u> ame:	dbBusiness.mdb			~	Create
Places	Save as <u>t</u> ype:	Microsoft Office #	Access Datab	base (*.mdb)	~	Cancel

Create tblBill in Design View:

5. Double-Click on Create table in Design view

률 dbBusiness :	Database (Access 2000 file format)						
🞼 Open 🔟 Desig	ini Open 🔽 Design 🛅 New 🗙 🔭 📴 🏦						
Objects	Create table in Design view						
🔲 Tables	Create table by using wizard						
📑 Queries	ureate table by entering cata						
📴 Forms							
Reports							
🗎 Payes							
🔁 Macros							
💐 Modules –							
Groups							
🛞 Favorites							

- 6. Design the table with the given FieldName and DataType.
- 7. Right-click on the BillNo. Set it as Primary Key.
- 8. Save the table with **tblBill** name.

	tblBill : Table			
	Field Name	Data Type	Description	~
8	BillNo	AutoNumber		
	ItemNo	Number		
	ItemName	Text		
	ItemPrice	Number		
	Quantity	Number		
	Total	Number		×
		Field F	roperties	
	General Lookup			
	field Size	ong Integer		
		iaremert		A field name
	-ormat			can be up to
	Laption X	a (No Duoliestas)		64
	maexed Internet	es (No Puplicates)		characters
	inarc rays			long,
				including
				spaces.
				bdp op field
				names.
				i idinosi
-				

9. Observe that the **dbBusiness** database contains **tblBill** table in the database window.



Query

- 10. Create a query that calculates Total = ItemPrice * Quantity.
- 11. To do this, in the **Database** window Click **Queries** from **Objects** panel.

🔄 dbBusiness :	Database (Access 2000 file format)						
🚰 Open 🕍 Design 🏪 New 🗙 🐁 🐎 🧱 🏢							
Objects	Create query in Design view						
💷 Tables	Create query by using wizard						
📑 Queries							
📴 Forns							
🗐 Reports							
🗎 Pages							
📿 Macros							
💐 Modules							
Groups							
📓 Favorites							
	L						

12. Click on New button. New Query dialog box appears.

13. Select Simple Query Wizard. Click OK

New Query	? 🛛
This wizard creates a select query from the fields you pick.	Design View Simple Query Wizard Crosstab Query Wizard Find Duplicates Query Wizard Find Unmatched Query Wizard
	OK Cancel

14. As we need to calculate query on Total, select single field Total and click on Next button.

	Which fields do you want in your query? You can choose from more than one table or query.
<u>T</u> ables/Queries	
Table: tblBill	~
<u>A</u> vailable Fields:	Selected Fields:
BillNo ItemNo	Total
ItemName	
ItemPrice Quantity	
Quantity	

15. Click Next.

	Would you like a detail or summary query?	
2 AAA XXXX XXXX 3 CCC XXXX XXXX 2 DOD THAN XXXX 3 DOD THAN XXXX 3 DOD THAN XXXX 4 AAA XXXX XXXX XXXX 4 CCC XXXX XXXX XXXX 5 DOD XXXX XXXX XXXX 6 DOD XXXX XXXX XXXX	Summary Summary Options	
	Cancel < Back Next > F	inish

16. Click Next.

Simple Query Wizard	
	What title do you want for your query? tblBill Query
	That's all the information the wizard needs to create your query. Do you want to open the query or modify the query's design? ② Open the query to view information O Modify the query design.
	Display Help on working with the query?

17. Click on Finish button. Close the select query window that appears.

18. Observe that the **dbBusiness** database contains **tblBill Query** in the database window.

dbBusiness :	Databas	e (Ac	ccess 2000 file format)			
😭 Open 🕍 Desig	📸 Open 🔽 Design 👘 New 🗙 🏪 😳 📰 🎬					
Objects	🖉 G	reate	query in Design view			
🔲 Tables	🔄 🖸	reate	query by using wizard			
Queries			<u>C</u> pen			
Forms		4	<u>D</u> esign View			
🖺 Reports		8	Print			
🗎 Pages		3	Print Pre <u>v</u> iew			
🔁 Matros		Ж	նլ			
💸 Modules		E)	Сору			
Groups			Save <u>A</u> s			
			Export			

- 19. Right-click on the tblBill Query and select Design View
- 20. Go to Query menu and select Update Query.

Microsoft Access		
Eile Edit View Insert Q	uery <u>T</u> ools <u>W</u> indow <u>H</u> elp	Type a question for help 👻
i 🗉 📲 🗳 🖾 🖏 🕈 🕈	Run 🗸 🗐 🕶	🍷 🐾 Σ All 🛛 🚽 😭 🏠 🛅 ⁄ 🖅 🦉
	Show Table	
📑 tblBill Query : Selec	Remove Table	
tbBill	j <u>S</u> elect Query	
* 🔼	Update Query	
BillNo	Append Query	
ItemName	SQL Specific 🔹 🕨	
ItemPrice 💌	Parameters	✓
	×	<u>></u>
Field: Total	V	
Table: tblBill		
Show:		
Criteria:		
Ready		NUM

🖻 tblBill (Query:Upd	ate (Query	_ 🗆 🛛
tbli *	Bill	Σ ¥Z	Tota <u>l</u> s Table <u>N</u> ames	
Item Item Item	No = Name Price v	× Þa FL	Corr Copy Paste	~
		<u>.</u>	<u>D</u> uild	 >
Field:	Total		<u>Z</u> oom	~
Table:	tblBill	1	Properties	
Update To: Criteria:				
or:				
	<		I	>

You can observe Sort and Show options are replaced with Update to option.

- 21. Right-click on the first cell next to Update to: and select Build. Expression Builder window appears.
- 22. Double click on tables and select tblBill from first list box. In the second list box all the fields of tblBill are displayed.
- 23. Double click on ItemPrice, entry will be added on the above box as [tblBill]![ItemPrice]
- 24. Click on * from the buttons given below the box.
- 25. Double click on Quantity, entry will be added on the above box as [tblBill]![Quantity] next to [tblBill]![ItemPrice] *

Expression Builder			? 🗙
$\begin{array}{ c } \hline \begin{tabular}{ c $	Quantity] d Or Not Like ()	Paste	OK Cancel Undo Help
 tblBill Query Tables Tables Queries Forms Reports Functions Constants Operators 	BillNo ItemNo ItemPrice Quantity Total	<value></value>	

26. Click OK and Save it.

🖻 tbBill (Query : Update Query	
tbl * Bill Iten Iten Iten	Bill No NAme Price	
<		>
Field: Table: Update To: Criteria: or:	Total tblBil [tblBil]![ItomFrico] * [tblBil]![Quantity]	×

Form

- 27. After creating Table and Query, Create a Form in the simple way as follows:
- 28. Select Forms from Database window under Objects.

📴 dbBusiness : Database (Access 2000 file format) 📃 🗖 🔀					
🚰 Open 🕍 Desig	n 🛅 Yow 🗙 🖕 🐎 🧱 🏢				
Objects	Create form in Design view				
😐 Tables	Create form by using wizard				
📑 Queries					
📑 Forms					
Reports					
🗎 Pages					
📿 Macros					
💸 Modules					
Groups					
😹 Favorites					

29. Click on New button.

30. Select Form Wizard and select tblBill in the box below and click OK.

New Form	? 🛛
This wizard automatically creates your form, based on the fields you select.	Design View Form Wizard AutoForm: Columnar AutoForm: Tabular AutoForm: Datasheet AutoForm: PivotTable AutoForm: PivotChart Chart Wizard PivotTable Wizard
Choose the table or query where the object's data comes from:	tblBill OK Cancel

31. Form wizard opens up, select all fields but the Total field.

Form Wizard	
	Which fields dc you want on your form? You can choose from more than ore table or query.
Taples/Queres	
Taple: tblBill	*
<u>A</u> vailable Fields:	Selected Fields:
Tctal	BillNo ItemNo ItemName ItemPrice Quantty
Ca	ncel <back next=""> Finish</back>

32. Click Next

Form Wizard What layout would you like for your form?	ſ
	 <u>Columnar</u> <u>Iabular</u> <u>Datasheet</u> <u>Justified</u> PivotTable PivotChart
Cancel C	< <u>B</u> ack <u>N</u> ext > <u>Finish</u>

33. Click Next

Form Wizard	
What style would you like?	
xxx xxxx xxxxx abel Data	Blends Blueprint Expedition Inclustrial International Ricepaper SandStone Standard Stone Sumi Painting
Cancel	< Back Next > Einish

34. Name the form as frmBill.

Form Wizard	
	What title do you want for your form? frmEill That's all the information the wizarc needs to create your form. Do you want to open the form or modify the form's design? Open the form to view or enter information. Modify the form's design.
	Display Help on working with the form?
[Cancel < <u>B</u> ack <u>N</u> ext > <u>Finish</u>

35. Click Finish.

Macro

36. Select Macros from Database window under Objects.



37. Use the dropdown menu to select your first action - choose "OpenForm".

38. In the bottom pane, select the form name you wish to open - choose "frmBill"

39. Select Data Mode as Add

2	Macro1 : Macro			×
	Action		Comment	>
	OpenForm	~		T
				9
<u> </u>				~
			Action Arguments	
Fo Via Fil W Da	orm Name ew ter Name here Condition ata Mode indow Mode	frmBi Form Add Norm	Opens a form in Form view, Design view, Print Proview, or Datasneet view. Press F1 for help on this acton.	

40. Use the dropdown menu to select your second action - choose "GoToRecord".41. In the bottom pane, choose the record you want to go to - choose "New".

What we're doing here is ensuring that the form doesn't open up a previous record it goes straight to the end and has a blank record ready for you to enter a new record (this saves time and unnecessary clicks).

2	Macro1 : Macro			×
	Action		Comment	~
	OpenForm			T
	GoToRecord	\checkmark		-
<u> </u>				
<u> </u>				
			Action Arguments	
oł	viect Type		Miden Har	-
Ob	oject Vame		specified	
Re	cord	New	record the	
Of	fset		current	
			record in a	
			table, form,	
			or query	
			Press E1 for	
			help on this	
				-

42. Run macro, access will open frmBill for you with New Record. You can fill the records.

==	frmBill	
Ĵ	BIIINO	1
	ltemNo	101
	ItemName	CD
	ItemPrice	15
	Quantity	50
Re	cord: 💽	1 • • • • • • • • 1

43. Click on Next arrow and fill the details.

-8	frmBill	
▶	BilNo	2
	ltemNo	304
	ItemName	Motherboard
	ItemPrice	1400
	Quantity	1
Re	ecord: 🚺 🔳	2 • • • • • • • • • • • • • • • • • • •

44. After entering details in the similar manner, open table tblBill, you can see the records are filled with the data but the Total field is not calculated.

	tblBill : Table				[
	BillNo	ltemNo	ltemName	ItemPrice	Quantity	Total
	1	101	CD	15	50	0
	2	304	Motherboard	1400	1	0
	3	710	Headphores	740	2	0
	4	565	Printer	6050	1	0
	5	357	DVD	55	12	0
	6	660	RAM	2000	1	0
*	(AutoNumber)	0		0	0	0
Re	cord: 🚺 🔍 🗍	1		of 6		

45. To calculate Total quickly run your query **tblBill Query1**

46. Access prompts before proceeding, click Yes.



47. Again it prompts say Yes.

Microsof	t Office Access	
	You are about to update 6 row(s).	
	Once you click Yes, you can't use the Undo command to reverse the changes. Are you sure you want to update these records?	
	Yes No	

48. Now open tblBill, you'll see Total field is filled with data calculated.

🔲 tblBill : Table						
	BillNo	ltemNo	ItemName	ItemPrice	Quantity	Total
	1	101	CD	15	50	750
	2	304	Motherboard	1400	1	1400
	3	710	Headphones	740	2	1430
	4	565	Printer	6050	1	6050
	5	357	DVD	55	12	660
	6	660	RAM	2000	1	2000
*	(AutoNumber)	0		0	0	0
Record: I I I I I I F I R of 6						