

Exercise 1

Objectives:

- Introduction to MS Excel files, Workbooks, Worksheets, Columns and Rows.
- Formatting Worksheets.
- AutoFill, Numeric formats, previewing worksheets.

	A	B	C	D	E	F	G
1	Payroll						
2	Date:	1/1/2011					
3	EMPL Number	EMPL Name	Hourly Rate	Hours Worked	Gross Pay	S.S Tax	Net Pay
4	E00001	Ford	7.5	35	?	?	?
5	E00002	Mino	8	30	?	?	?
6	?	Bell	6.5	25	?	?	?
7	?	Davis	9	40	?	?	?
8	?	Turro	10	39	?	?	?

- Open a new workbook and save the file with the name "Payroll".
- Enter the labels and values in the exact cells locations as desired.
- Use AutoFill to put the Employee Numbers into cells A6:A8.
- Set the columns width and rows height appropriately.
- Set labels alignment appropriately.
- Use warp text and merge cells as desired.
- Apply borders, gridlines and shading to the table as desired.
- Format cell B2 to Short Date format.
- Format cells E4:G8 to include dollar sign with two decimal places.
- Calculate the Gross Pay for employee; enter a formula in cell E4 to multiply Hourly Rate by Hours Worked.
- Calculate the Social Security Tax (S.S Tax), which is 6% of the Gross Pay; enter a formula in cell F4 to multiply Gross Pay by 6%.
- Calculate the Net Pay; enter a formula in cell G4 to subtract Social Security Tax from Gross Pay.
- Set the work sheet vertically and horizontally on the page.
- Save your work.

Exercise 2

Objectives:

- Using Formulas.
- Header and Footers.

	A	B	C	D	E
1	London Team Call Statistics				
2					
3	Name	No. calls	Hours worked	Calls per Hour	Bonus
4	Adam	42	5	?	?
5	Jhon	6	4	↓	↓
6	Jamse	39	6	↓	↓
7	Alex	15	6	↓	↓
8	Emma	2	7	↓	↓
9					
10	TOTAL	?	?	?	?
11					
12	Bonus Rate	25%			

- Open a new workbook and save the file with the name "Call Statistics".
- Delete Sheet 2 & 3, and rename Sheet 1 to (Call Statistics).
- Enter the labels and values in the exact cells locations as desired.
- Set the row height of rows 1 & 3 to size 30; and rows 4 until 10 to size 20.
- Set labels alignment appropriately.
- Use Warp Text, Orientation and merge cells as desired.
- Apply border, gridlines and shading to the table as desired.
- Format column E to include euro (€) sign with two decimal places.
- Format cell B12 to include % sign with 0 Decimal places.
- Calculate the Calls per Hour, enter a formula in cell D4 to divide numbers of calls by Hours worked. Using AutoFill, copy the formula to the remaining cells.
- Calculate the Bonus. Enter a formula in cell E4 to multiply 'Calls per Hours' by the fixed Bonus Rate in cell B12. Using AutoFill, copy the formula to the remaining cells.
- Calculate the 'TOTAL'.
- Set the worksheet vertically and horizontally on the page.
- Create a header that includes your name in the left section, and your ID number in the right section. Create the footer that includes the current Date in the center.

Exercise 3

Objectives:

- Number, Commas and Decimal numeric formats.
- Working with Formulas (Maximum, Minimum, Average, Count and Sum).
- Percentage Numeric Formats.

	A	B	C	D	E	F
1	Panda EST					
2	Monthly Sales Report - July					
3						
4	Emp. No.	Name	Salary	Sales Amount	Comission	Total Salary
5	S101	Ahmed	1600	2500	?	?
6	S105	Hassan	1800	3000		
7	S112	Ali	1500	2200		
8	S107	Waleed	2000	4500		
9	S110	Mohammed	1700	3500		
10	S103	Samir	1600	2500		
11						
12		Totals	?	?	?	?
13		Average	?	?	?	?
14		Highest	?	?	?	?
15		Lowest	?	?	?	?
16		Count	?			

15. Create the worksheet shown above.
16. Set the **column widths** as follows: Column A: 8, Column B: 14, Columns C & D: 15, Columns E & F: 14.
17. Enter the formula to find COMMISSION for the first employee. The commission rate is 2% of sales, **COMMISSION = SALES * 2%** Copy the formula to the remaining employees.
18. Enter the formula to find TOTAL SALARY for the first employee where: **TOTAL SALARY = SALARY + COMMISSION** Copy the formula to the remaining employees.
19. Enter formula to find **TOTALS, AVERAGE, HIGHEST, LOWEST, and COUNT** values. Copy the formula to each column.
20. Format numeric data to include **commas** and **two decimal places**.
21. Align all column title labels horizontally and vertically **at the center**.
22. Create a **Header** that includes your name in the left section, page number in the center section, and your ID number in the right section.
23. Create **footer** with DATE in the left section and TIME in the right section.
24. Save the file with name Exercise 3.

Exercise 4

Objectives:

- Working with the IF Statement.

	A	B	C	D	E	F	G
	ITEM NO	NO OF ITEMS	ITEM PRICE	TAX	TOTAL PRICE BEFORE TAX	TOTAL PRICE AFTER TAX	RATE
1							
2	100	115	30				
3	101	256	12				
4		49	56				
5		23	150				
6		840	5				
7		200	56				
8		294	300				
9		4	90				
10							
11	COUNT OF ITEMS		?				
12	AVERAGE OF TAX		?				
13	MIN ITEM PRICE		?				
14	MAX ITEM PRICE		?				
15							

For the above table find the following:

25. TAX (If ITEM PRICE is less than 100, TAX is 50, and otherwise it should be 100).
26. TOTAL PRICE BEFORE TAX = NO. OF ITEMS * ITEM PRICE.
27. TOTAL PRICE AFTER TAX = TOTAL PRICE BEFORE TAX + TAX.
28. RATE (If TOTAL PRICE AFTER TAX > 3500 then the rate is "HIGH", otherwise it is REASONABLE.
29. Find Count of Items, Average of Taxes, Min Item PRICE and Max Item PRICE.
30. Save file as Exercise 4.

Exercise 5

Using the IF function to quickly calculate electricity bills in Excel

Meter No	Past Unit	Current Unit	Difference/ Uses unit	Amount	Vat 15%	Total Payable
1	534	722				
2	371	621				
3	186	398				
4	843	992				
5	627	942				

Slab	Amount
0-50	1.5
51-100	2.0
101-200	2.5
201-400	3.0
401-500	3.5
>500	5.0

Q.1 Find the difference cell use subtract function for uses unit.

Q.2 Find Grade Using If Function

= (If uses <=50 then "uses*1.5, If uses <=100 then "uses*2.0,

If uses <=200 then "uses*2.5, If uses <=400 then "uses*3.0, If uses <=500 then "uses*3.5, otherwise uses*5.0)))) for all.

Q.3 Calculate vat for each user.

Q.4 Total payable calculates by sum

Q.5 Count how many users Use electricity greater than >500.

Exercise 6

Use of Formulas - Product, If, Counta, Countif, Sumif

SRNO	ITEMS	QTY	RATE	AMOUNT	GRADE
1	AC	20	40000	800000	Expensive
2	FRIDGE	30	20000	?	
3	COOLER	15	10000	?	
4	WASHING MACHINE	14	15000	?	
5	TV	18	20000	?	
6	FAN	17	2000	?	
7	COMPUTER	10	25000	?	
8	KEYBOARD	5	250	?	
9	MOUSE	25	100	?	
10	PRINTER	30	12000	?	

Q.1 Using of Product Formula for Calculate Amount = Qty*Rate

Q.2 How Many Items in a List

Q.3 How Many Items qty Greater Than > 20 and Less Than

Q.4 Calculate Item Computer Qty, Rate and Amount using Sum if Formula

Q.5 If Items Amount is Greater > 500000, Then Items "Expensive" otherwise "Let's Buy it".

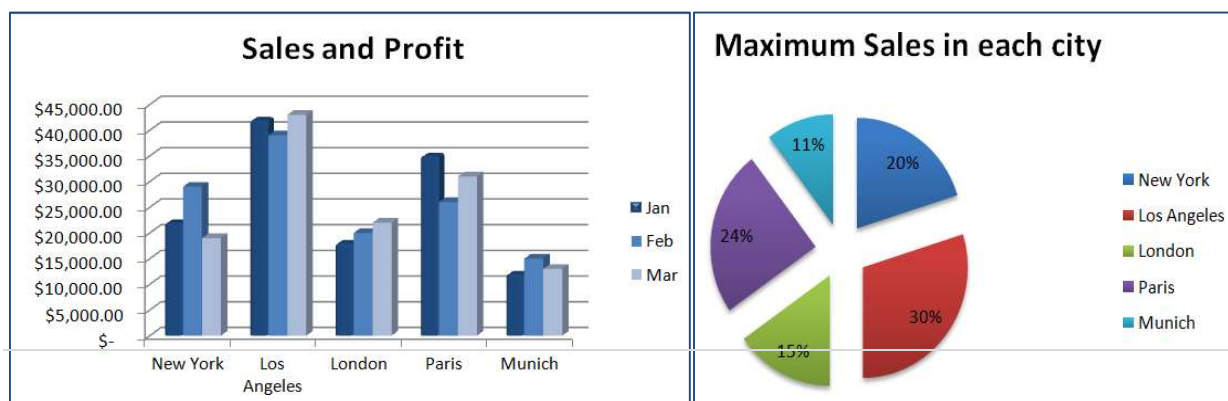
Exercise 7

Objectives:

- Working with Sum IF and Count IF statements.

	A	B	C	D	E	F	G
1	Sales and Profit Report - First Quarter 2012						
2	No	City	Jan	Feb	Mar	Average	Maximum
3	C001	New York	\$22,000.00	\$29,000.00	\$19,000.00	?	?
4	C002	Los Angeles	\$42,000.00	\$39,000.00	\$43,000.00	?	?
5	?	London	\$18,000.00	\$20,000.00	\$22,000.00	?	?
6	?	Paris	\$35,000.00	\$26,000.00	\$31,000.00	?	?
7	?	Munich	\$12,000.00	\$15,000.00	\$13,000.00	?	?
8		Total Sales	?	?	?		
9		Cost	\$83,000.00	\$84,000.00	\$43,000.00		
10		Profit	?	?	?		
11		10% Bonus	?	?	?		
12							
13		Total Sales greater than 30,000	?	?	?		
14		No Sales greater than 30,000	?	?	?		

- Create the worksheet shown above.
- Set the Text alignment, Columns width and high appropriately.
- Use AutoFill to put the Series Numbers into cells A5:A7.
- Format cells C3:G7, C8:E11, C13:E13 to include dollar sign with two decimal places.
- Find the Average Sales and Maximum Sales for each City.
- Find the Total Sales for each Month.
- Calculate the Profit for each month , where profit = Total Sales – Cost
- Calculate the 10% Bonus, which is 10% of the Profit.
- Find the Total Sales for each Month; only for sales greater than 30,000.
- Find the No of Sales for each Month; only for sales greater than 30,000.
- Create the following Charts:



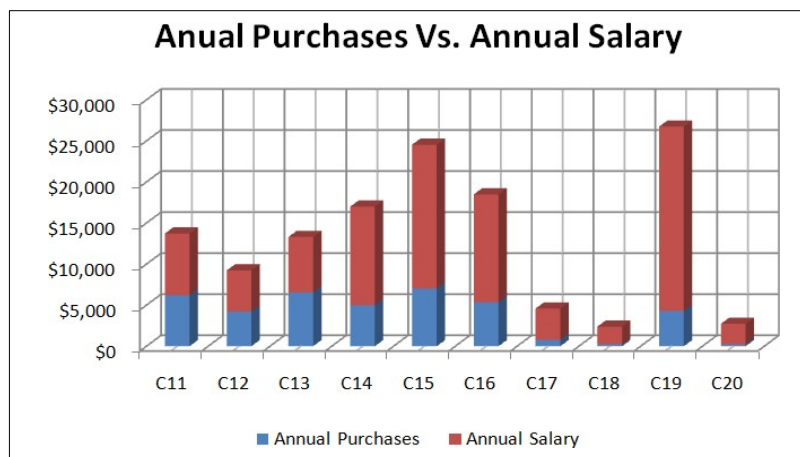
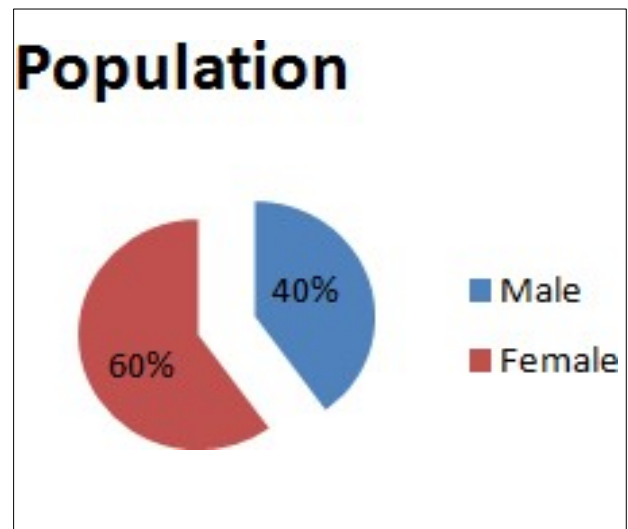
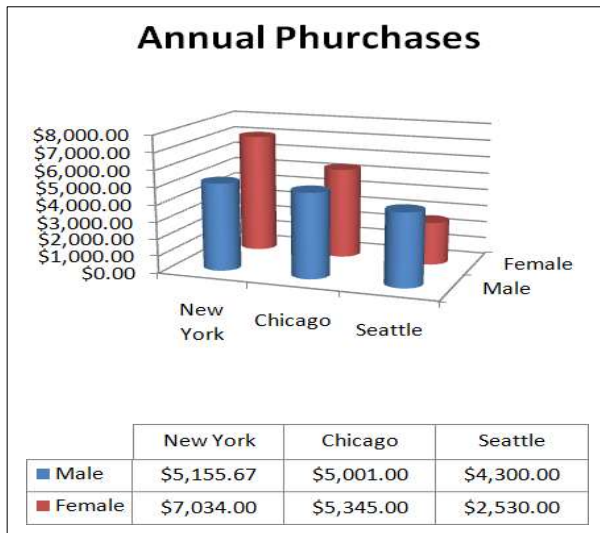
Exercise 8

	A	B	C	D	E	F
1	USA Annual Purchases Report 2011					
2	Customer ID	Gender	City	Education	Annual Purchases	Annual Salary
3	C11	M	New York	University	\$6,233	\$7,500
4	C12	M	New York	High School	\$4,233	\$4,999
5		F	Seattle	University	\$6,560	\$6,750
6		M	Chicago	University	\$5,001	\$12,000
7		F	New York	University	\$7,034	\$17,500
8		F	Chicago	University	\$5,345	\$13,150
9		F	Seattle	High School	\$790	\$3,799
10		F	Seattle	None	\$240	\$2,150
11		M	Seattle	University	\$4,300	\$22,450
12	✓	f	New York	None	\$232	\$2,500
13						
14						
15	City	Total Annual Purchases		Annual Salary	Gender	
16	New York	?		City	Male	Female
17	Chicago	?		New York	?	?
18	Seattle	?		Chicago	?	?
19				Seattle	?	?
20	Education	Average Annual Purchases				
21	University	?				
22	High School	?				
23	None	?				
24						
25	Gender	Population				
26	Male	?				
27	Female	?				

Objectives:

1. Open a new workbook and create the above worksheet.
2. Make sure that your worksheet looks like the picture (Alignment, Sheddng, Borders, Wrap text, Orientation ...).
3. Find the entire customer IDs.
4. Format Colum E & D to Currency with dollar sign and two decimal places.
5. Find the Total Annual Purchases for each City.

6. Find the Average Annual Purchases for each Education.
7. Find the total number of customers from each gender.
8. Find the total annual salary for each gender in each city.
9. Create the following Chart:



Exercise-9: MS-Excel

SL NO	Name	Basic Salary	House Rent	Medical Allowance	Travel Allowance	Provided Fund	Tax	Net Salary
1	Emran	21000						
2	Nazmul	12000						
3	Sirajul	14500						
4	Alif	75000						
5	Shihab	9000						

By following the given steps, you have to design the above worksheet using MS-Excel:

Objectives:

1. Calculate House Rent Allowance = 9% of Basic Salary
2. Medical Allowance = 6% of Basic Salary
3. Travel Allowance = 7% of Basic Salary
4. Provident Fund = 5% of Basic Salary
5. Net Salary = Basic Salary + House Rent Allowance + Medical Allowance + Travel Allowance – (Provident Fund + Tax)
6. Save the worksheet as Salary sheet.
7. Fill the tab color as dark red.

Exercise-10: MS-Excel

Objectives:

Working with IF and nested IF statements.

	A	B	C	D	E	F	G	H	I	J	K	L
1		Calculation of Grade Using IF Function										
2												
3		Student Name	Physics	Math	Chemistry	History	Total Marks	Percentage	Grade Achieved		Score	Grade
4		Nazmul	72	69	62	87					0-59%	F
5		Chamely	98	51	57	57					60-69%	D
6		Azizul	91	98	51	89					70-79%	C
7		Parul	64	75	51	56					80-89%	B
8		Keya	51	79	64	78					90-100%	A
9		Kazal	89	86	87	56						
10		Josna	96	88	94	80						
11		Joba	97	71	52	52						
12		Lamiya	51	72	55	84						
13		Faruk	52	90	78	94						

By following the given steps, you have to design the above worksheet using MS-Excel:

1. Open new Workbook of Excel.
2. Set paper size to 'Legal', orientation to Landscape and margin to 'Narrow' or according to given measurement.
3. Change font size of cell to '13' and font name to 'Times New Roman & Color White'.
4. Merge the cells of row 1, change the font size to 16 and make it Bold, Cell Color Light Green and Center aligned.
5. Calculate the Total Marks by using Sum Function.
6. Calculate the Percentage by using Simple Formula
7. Make Grade-Achieved for each student by Using Nested if Function.
8. Save the worksheet name with result sheet.