

College



University of Bahrain  
of Information Technology  
Department of Information Systems

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# MS Excel Exercises



## 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	<b>Payroll</b>						
2	<b>Date:</b>	1/1/2011					
3	<b>EMPL Number</b>	<b>EMPL Name</b>	<b>Hourly Rate</b>	<b>Hours Worked</b>	<b>Gross Pay</b>	<b>S.S Tax</b>	<b>Net Pay</b>
4	E00001	Ford	7.5	35	?	?	?
5	E00002	Mino	8	30	?	?	?
6	?	Bell	6.5	25	?	?	?
7	?	Davis	9	40	?	?	?
8	?	Turro	10	39	?	?	?

1. Open a new workbook and save the file with the name "Payroll".
2. Enter the labels and values in the exact cells locations as desired.
3. Use AutoFill to put the Employee Numbers into cells A6:A8.
4. Set the columns width and rows height appropriately.
5. Set labels alignment appropriately.
6. Use warp text and merge cells as desired.
7. Apply borders, gridlines and shading to the table as desired.
8. Format cell B2 to Short Date format.
9. Format cells E4:G8 to include dollar sign with two decimal places.
10. Calculate the Gross Pay for employee; enter a formula in cell E4 to multiply Hourly Rate by Hours Worked.
11. 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%.
12. Calculate the Net Pay; enter a formula in cell G4 to subtract Social Security Tax from Gross Pay.
13. Set the work sheet vertically and horizontally on the page.
14. Save your work.

## Exercise 2

### Objectives:

- ▶ Using Formulas.
- ▶ Header and Footers.

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

1. Open a new workbook and save the file with the name “Call Statistics”.
2. Delete Sheet 2 & 3, and rename Sheet 1 to (Call Statistics).
3. Enter the labels and values in the exact cells locations as desired.
4. Set the row height of rows 1 & 3 to size 30; and rows 4 until 10 to size 20.
5. Set labels alignment appropriately.
6. Use Warp Text, Orientation and merge cells as desired.
7. Apply border, gridlines and shading to the table as desired.
8. Format column E to include euro (€) sign with two decimal places.
9. Format cell B12 to include % sign with 0 Decimal places.
10. 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.
11. 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.
12. Calculate the ‘TOTAL’.
13. Set the worksheet vertically and horizontally on the page.
14. 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	<b>Panda EST</b>					
2	<b>Monthly Sales Report - July</b>					
3						
4	<b>Emp. No.</b>	<b>Name</b>	<b>Salary</b>	<b>Sales Amount</b>	<b>Comission</b>	<b>Total Salary</b>
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		<b>Totals</b>	?	?	?	?
13		<b>Average</b>	?	?	?	?
14		<b>Highest</b>	?	?	?	?
15		<b>Lowest</b>	?	?	?	?
16		<b>Count</b>	?			

1. Create the worksheet shown above.
2. Set the **column widths** as follows: Column A: 8, Column B: 14, Columns C & D: 15, Columns E & F: 14.
3. 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.
4. Enter the formula to find TOTAL SALARY for the first employee where:  
**TOTAL SALARY = SALARY + COMMISSION**  
Copy the formula to the remaining employees.
5. Enter formula to find **TOTALS, AVERAGE, HIGHEST, LOWEST**, and **COUNT** values.  
Copy the formula to each column.
6. Format numeric data to include **commas** and **two decimal places**.
7. Align all column title labels horizontally and vertically **at the center**.
8. 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.
9. Create **footer** with DATE in the left section and TIME in the right section.
10. 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	<b>Count of items</b>		?				
12	<b>Average of tax</b>		?				
13	<b>Min ITEM PRICE</b>		?				
14	<b>Max ITEM PRICE</b>		?				

For the above table find the following:

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

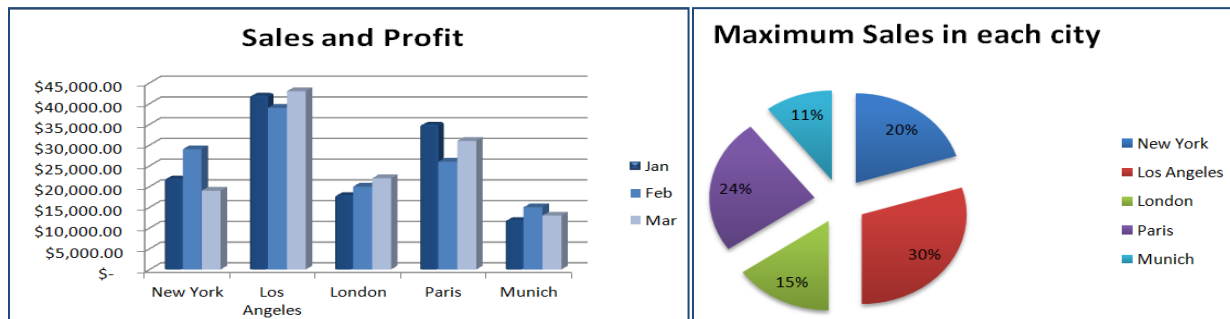
## Exercise 5

**Objectives:**

- Working with Sum IF and Count IF statements.
- Inserting Charts.

	A	B	C	D	E	F	G
1	<b>Sales and Profit Report - First Quarter 2012</b>						
2	<b>No</b>	<b>City</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Average</b>	<b>Maximum</b>
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		<b>Total Sales</b>	?	?	?		
9		<b>Cost</b>	\$83,000.00	\$84,000.00	\$43,000.00		
10		<b>Profit</b>	?	?	?		
11		<b>10% Bonus</b>	?	?	?		
12							
13		<b>Total Sales greater than 30,000</b>	?	?	?		
14		<b>No Sales greater than 30,000</b>	?	?	?		

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



## Exercise 6

**Objectives:**

- Working with Sum IF and Count IF statements.
- Inserting Charts.

	A	B	C	D	E	F
1	<b>USA Annual Purchases Report 2011</b>					
2	<b>Customer ID</b>	<b>Gender</b>	<b>City</b>	<b>Education</b>	<b>Annual Purchases</b>	<b>Annual Salary</b>
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	<b>City</b>	<b>Total Annual Purchases</b>		<b>Annual Salary</b>	<b>Gender</b>	
16	New York	?		<b>City</b>	<i>Male</i>	<i>Female</i>
17	Chicago	?		New York	?	?
18	Seattle	?		Chicago	?	?
19				Seattle	?	?
20	<b>Education</b>	<b>Average Annual Purchases</b>				
21	University	?				
22	High School	?				
23	None	?				
24						
25	<b>Gender</b>	<b>Population</b>				
26	Male	?				
27	Female	?				

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:

