Microsoft Excel allows you to create professional spreadsheets and charts. It performs numerous functions and formulas to assist you in your projects.

The Excel screen is devoted to the display of the workbook. The workbook consists of grids and columns. The intersection of a row and column is a rectangular area called a *cell*.

The Excel worksheet contains 16,384 rows that extend down the worksheet, numbered 1 through 16384.

The Excel worksheet contains 256 columns that extend across the worksheet, lettered A through Z, AA through AZ, BA through BZ, and continuing to IA through IZ.

The Excel worksheet can contain as many as 256 sheets, labeled Sheet1 through Sheet256. The initial number of sheets in a workbook, which can be changed by the user is 16.

Each cell have its own *Cell references*, which are the combination of column letter and row number. For example, the upper-left cell of a worksheet is A1.

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Exercise 1

	A	B	C	D	E	F
1						
2			Coral AutoMall			
3	Sl. Num	Sales Person	CarType	New/Used	Date of Transaction	Amount
4	111	Ali	Honda	New	22-Jan	19000
5	112	Mohd	Mercedes	Used	03-Feb	24200
6		Hussain	BMW	New	08-Feb	46000
7		Saud	Lexus	New	15-Feb	45000
8		Ahmed	Honda	Used	15-Feb	8500
9						

1. Open a new Excel file. Delete the worksheets: Sheet2 and Sheet3.

2. Create the worksheet shown above in Sheet1 and rename it as **Coral.**

3. Set the column widths as Columns A, B: 9; Columns C& D: **11**.

4. Set the Height of Row 2 as 40.

5. Align all column labels horizontally and vertically at the center.

6. After entering the data, insert a new row between rows 2 & 3.

7. Format column **F** to include $ sign and 2 decimal places.

8. Apply border to the cells.

9. Center the worksheet vertically and horizontally on the page.

10. Save the file with the name **Excel 1.**

Exercise 2

	A	B	C	D	E	F	G
1	ABC STORE						
2	Product	Number of Units	List Price	Discount	Sales Price	Sales Tax	Total Price
3	Beauty Products	420	800	100	?	?	?
4	Handbags	150	789	43			
5	Perfumes	200	890	88			
6	Accessories	98	460	25			
7	Summer Clothes	75	560	30			
8							

1. Create the worksheet shown above.

2. Set the column widths appropriately.

3. Enter a formula to find **Sales Price** for the first item.
   Sale Price = List Price-Discount. Copy the formula to the remaining items.

4. Enter a formula to find **Sales Tax** for the first Item.
   Sale Tax = Sales Price * 0.05. Copy the formula to the remaining items.

5. Enter a formula to find Total Price for the first item.
   Total Price = Sales Price + Sales Tax. Copy the formula to the remaining items.

6. Set the columns labels alignments appropriately.

7. Create a Header that includes Your Name in the left section, Date in the center section, and Your ID number in the right section.

8. Create Footer with Page Number in the center section.

9. Center the worksheet vertically and horizontally on the page.

10. Save the file with the name **Excel 2.**

Exercise 3

	A	B	C	D	E	F
1			Jassim EST.			
2			Quarterly Salary Report: April-June			
3						
4	EMP NO.	Employement Name	Base Salary	Sales	Commission	Quarterly Salary
5	100	Ahmed	1250	45453	?	?
6	102	Sami	1165	56643		
7		Khalid	1076	64623		
8		Majid	1340	48000		
9		Hassan	1220	521212		
10						
11		Totals	?	?	?	?
12		Average	?	?	?	?
13		Highest	?	?	?	?
14		Lowest	?	?	?	?
15		Count	?			
16						

1. Create the worksheet shown above.

2. Set the column widths as follows:
   Column **A: 5**, Column **B: 18**, Columns **C & D: 13**, Columns **E & F: 14**.

3. Enter the formula to find **COMMISSION** for the first employee. The commission rate is 4% of Sales (i.e. **COMMISSION = SALES * 4%).** Copy the formula to the remaining employees.

4. Enter the formula to find **QUARTERLY SALARY** for the first employee where **QUARTERLY SALARY = BASE SALARY + COMMISSION**. Copy the formula to the remaining employees.

5. Enter formula to find TOTALS, AVERAGE, HIEGHEST, LOWEST and COUNT values. Copy the formulas 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 the name **Excel 3**.

Exercise 4

	A	B	C	D	E
1		Civic Arena Ferret Frolic Results			
2					
3	Description	This Year	Last Year	Change	%Change
4	Pre-sold Tickets	8750	7000	?	?
5	Gate Receipts	100	8500		
6	Concession Percentage	100	1150		
7	Club Memberships	6500	6250		
8	Gift Sales	1100	1100		
9					
10	TOTAL	?	?	?	?
11	AVERAGE	?	?	?	?
12	LOWEST	?	?		
13	HIGHEST	?	?		
14					

1. Create the worksheet shown above.

2. Set the column widths as follows:
   Column **A: 18**, Column **B, C, D, E: 10.**

3. Enter a formula to find **Change** for the first item where
   Change = This Year – Last year. Copy the formula to the remaining items.

4. Enter a formula to find **%Change** for the first item where
   % Change = Change / Last year. Copy the formula to the remaining items.

5. Enter a formula to find TOTALS, AVERAGE, HIGHEST, and LOWEST
   values. Copy the formula to each column.

6. Format Column **E** to include % and two decimal places.

7. Create a Header that includes Your ID in the left section and Name in the right
   section.

8. Create Footer with page Number in the center section.

9. Center the worksheet vertically and horizontally on the page.

10. Save the file with the name **Excel 4**.

Exercise 5

	Student	Test Average	Project	Total	Final Grade Pass or Fail	Performance
	First Sem-Results					
4	Ahmed	74.1	5	?	?	?
5	Ali	51.5				
6	Amal	59.9	7			
7	Mona	79.4	8			
8	Eman	53.5	4			
9						
10	Class Average	?	?	?		
11	Highest Grade	?	?	?		
12	Lowest Grade	?	?	?		
13	No. of students	?	?			
14						

1. Create the worksheets shown above.

2. Set the column widths appropriately.

3. Find the **Total** marks of each student, where **Total = Test Average + Project.**

4. Using IF Statement, Find the **Final Grade** of students. If Total is greater than 60, Final Grade is "**Pass**", otherwise "**Fail**".

5. Find the Performance of each student. If the Project mark is less than 6, Performance is "**Poor**", otherwise "**OK**".

6. Calculate the **Class Average**, **Highest Mark**, **Lowest Mark** and **Count** the number of students.

7. Create Header that includes date in the left section and Time in the right section.

8. Create Footer with ID Number in the left section and Page Number in the center section.

9. Center the worksheet vertically and horizontally on the page.

10. Save the file with the name **Excel 5**.

Exercise 6

	A	B	C	D	E	F	G	H
1								
2			**SAMM'S CARS**					
3			**COMMISSION REPORT FOR SALES PERSONNEL**					
4								
5	NO.	NAME	LOCATION	SALES	COMM. RATE	COMM.	BONUS	TOTAL COMPEN
6	120	BUICK	ELMHURST	640000	0.04	?	?	?
7	150	CADDY	JAMAICA	450000	0.03			
8		FORD	ELMHURST	745000	0.04			
9		HONDA	MASPETH	12500	0.03			
10		LEXUS	JAMAICA	510000	0.03			
11		NISSAN	MASPETH	74500	0.04			
12								
13		TOTAL		?		?	?	
14		HIGHEST		?		?	?	
15		LOWEST		?		?	?	
16								

1. Create the worksheet shown above and rename it as **Commission Report**.

2. Set the column widths appropriately.

3. Use any **AutoFormat** to your worksheet.

4. Set the Cell Range A6:A11 to Number.

5. Find **COMM.** (Commission), where **COMM = SALES * COMM. RATE**.

6. Find the **BONUS**. If SALES greater than or equal to 500000, bonus is 0.5% on SALES, otherwise enter zero.

7. Find **TOTAL COMPENSATION** which is equal to **COMM. + BONUS**.

8. Calculate the **TOTAL, HIGHEST**, and **LOWEST** values as shown above.

9. Format Column E to include % and 2 decimal places.

10. Format Column H to include $ and 3 decimal places.

11. Center the worksheet vertically and horizontally on the page.

12. Save the file with the name **Excel 6**

Exercise 7

	A	B	C	D	E	F
1			**INVENTORY LIST**			
2			**PRINGLEAUTO REPAIR SHOP**			
3						
4	ITEM NUMBER	ITEM	UNIT COST	SELLING PRICE	MARKUP	%MARKUP
5	0142	TIRES	55	77	?	?
6	0152	BRAKES	60	84		
7		ALARM	125	195		
8		MATS	45	63		
9		BATTERY	50	70		
10		RADIO	185	265		
11		FAN BELT	15	28		
12						
13	Total Unit Cost		?			
14	Total Cost Greater than 100		?			
15	Total SELLING PRICE less than 80			?		
16	Count				?	
17	Count of Markup less than 20				?	
18	Count of markup greater than or equal to 50				?	
19						

1. Create the worksheet shown above.

2. Find **MARKUP**, where **MARKUP = SELLING PRICE – UNIT COST**.

3. Find **%MARKUP**, where **%MARKUP = MARKUP/UNIT COST**.

4. Format Column F to include % and 3 decimal places.

5. Calculate the **TOTALS** and **COUNTS** shown above using appropriate functions.

6. Save the file with the name **Excel 7**.

Exercise 8

	A	B	C	D	E	F	G	H	I	J	K
1											
2	**Professor's Grade Book**										
3	**Student Name**	**ID**	Midterm1 (25%)	Midterm2 (25%)	Project (10%)	Final (40%)	Grade (100%)	Status			
4	Khalid	85200	25	21	8	30	?	?			
5	Najla	85220		20	7	36					
6	Latifa		18	16	6	17					
7	Jassim		19	15		27					
8	Zuhair			18	9	38					
9											
10	Average		?	?	?	?					
11	Highest Mark		?	?	?	?					
12	Lowest Mark		?	?	?	?					
13	Number of		?	?	?	?					
14	No. of Projects greater than 8				?						
15	Sum of final marks less than or equel to					?					
16											

	Khalid	Najla	Latifa	Jassim	Zuhair
Final (40%)	30	36	17	27	38
Grade (100%)	84.0	63.0	57.0	61.0	65.0

1. Create the worksheet shown above and rename it as **Grades**.

2. Find **Grade** which is equal to **Midterm1 + Midterm2 + Project + Final**.

3. Find **Status** for each student, any student with a grade better than or equal to 80 is called "*Distinct*", all other students are called "*Fulfilled*".

4. Use the auto format   as shown in the figure.

5. Create a **Column chart** based on the columns **Student Name, Final** and **Grade**.
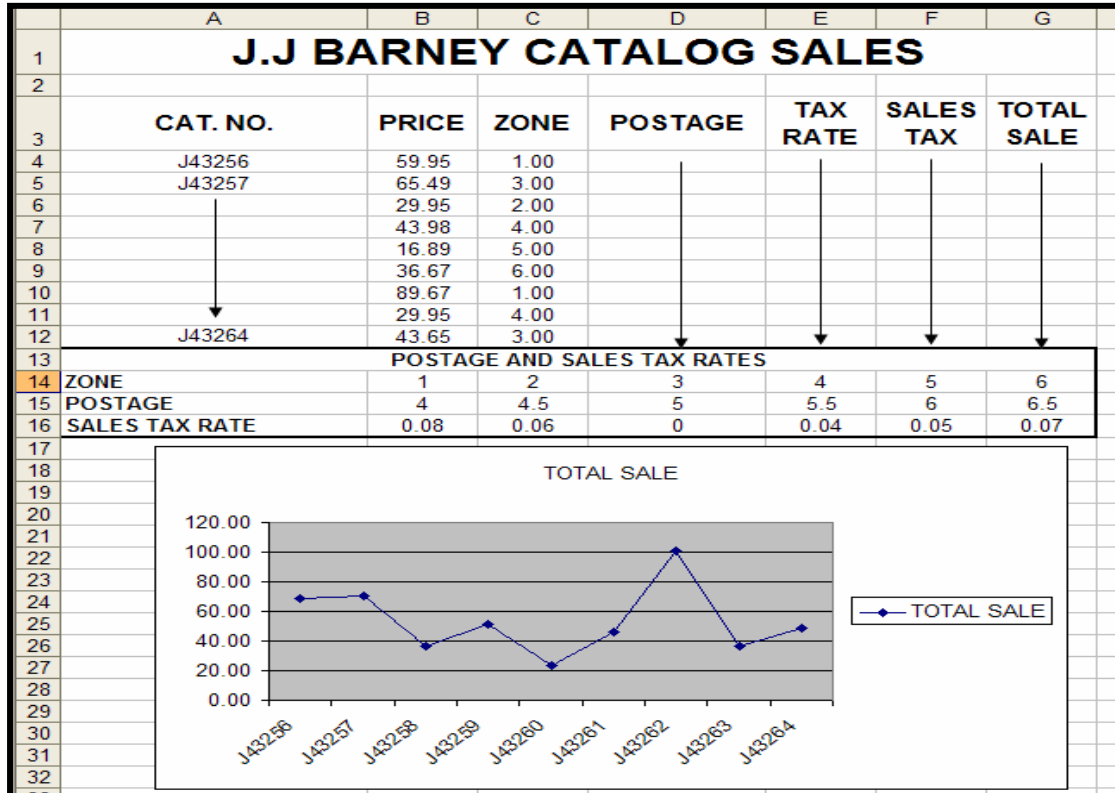
6. Save the file with the name **Excel 8**.

Exercise 9

	A	B	C	D	E	F	G	H	I	J
1	OSCAR RENT A CAR COMPANY									
2										
3	Commission Rate			5.00%						
4	Social Insurance Rate			2.50%						
5										
6										
7	Emp No.	Employee Name	Grade	Base Salary	Sales	Commission	Car Allowance	Social Insurance Cut	Monthly Salary	Position
8	001250	Nader	A	600	16000	?	?	?	?	?
9	001260	Isa	B	400	11000					
10		Faisal	A	550	20000					
11		Nadia	D	320	13000					
12		Eman	C	400	15000					
13		Hamad	D	250	14000					
14		A.Aziz	B	450	17000					
15										
16	TOTAL			?	?					
17	AVERAGE			?	?					
18	HIGHEST			?	?					
19	LOWEST			?	?					
20	NO. OF EMPLOYEES			?						
21										
22					GRADE TABLE					
23					A	Senior				
24					B	Junior				
25					C	Executive				
26					D	Training				
27										

1. Create the worksheet shown above and rename it as **OSCAR**.

2. Name the cell range A22:B26 as **Grade**.

3. Find **Commission**. Commission = Sales * Commission Rate.

4. Find **Car Allowance**. Employees with grade D will get a Car Allowance BD 100 and others will get a zero.

5. Find Social Insurance Cut which is Basic Salary * Social Insurance Rate.

6. Find **Monthly Salary** which is Base Salary + Commission + Car Allowance – Social Insurance Cut.

7. Using VLOOKUP, Find **Position** based on Grade.

8. Save the file with the name **Excel 9**.

EXERCISE 10

	A	B	C	D	E	F	G
1		**J.J BARNEY CATALOG SALES**					
2							
3	CAT. NO.	PRICE	ZONE	POSTAGE	TAX RATE	SALES TAX	TOTAL SALE
4	J43256	59.95	1.00				
5	J43257	65.49	3.00				
6		29.95	2.00				
7		43.98	4.00				
8		16.89	5.00				
9		36.67	6.00				
10		89.67	1.00				
11		29.95	4.00				
12	J43264	43.65	3.00				
13		POSTAGE AND SALES TAX RATES					
14	ZONE	1	2	3	4	5	6
15	POSTAGE	4	4.5	5	5.5	6	6.5
16	SALES TAX RATE	0.08	0.06	0	0.04	0.05	0.07

1. Create the worksheet shown above and rename it as ZONE.

2. Using HLOOKUP, Find **POSTAGE** based on ZONE.

3. Find **TAX RATE** based on ZONE.

4. Find **SALES TAX**, where **SALES TAX = PRICE * TAX RATE**.

5. Find **TOTAL SALE**, where **TOTAL SALE = PRICE + POSTAGE + TAX RATE**.

6. Format all money columns for two-place decimals.

7. Create a Header that includes Your Name in the left section an ID Number in the right section.

8. Create the chart illustrated above.

9. Save the file with the name **Excel 10**.

Exercise 11

	A	B	C	D	E	F	G	H	I
1				NTU Computer Store					
2				Inventory Status					
3									
4	Item Num	Description	Quantity	Unit Price	Type	Price Increase (%)	Sale Price	Warranty	Total Price
5	F0020	Dell Monitor	9	120	M	?	?	?	?
6	F0025	MS Mouse	25	5	O				
7		LG Monitor	5	90	M				
8		Intel CPU	10	170	C				
9		MS Keyboard	14	15	K				
10		MS Joystick	22	7	J				
11		MS Keyboard	3	8	K				
12									
13		Total	?						?
14		Average		?			?		
15		Highest	?				?		
16		Lowest	?				?		
17									
18		Percentage Rate							
19		Type	Price Increase						
20		C	25%						
21		J	40%						
22		K	35%						
23		M	25%						
24		O	20%						
25									

1. Create the worksheet shown above and rename it as NTU.

2. Format Column F to Percentage type.

3. Find **Price Increase (%)**, depending on the type.

4. Find **Sale Price**, where **Sale Price = Unit Price * Price Increase + Unit Price**.

5. Find **Warranty**. If Unit Price greater than 10, then <u>Yes</u> and <u>No</u>, if it is not.

6. Find **Total Price** which is equal to **Quantity * Sale Price**.

7. Calculate the **TOTAL, AVERAGE, HIGHEST**, and **LOWEST** values as shown above.

8. Draw a Pie Chart between **Type** and **Sale Price**.

9. In cell G18, find how many items with cheaper than 100.

10. In cell G19, find total quantities which are greater than 20.

11. Save the file with the name **Excel 11**.