

Open a new Excel workbook and save it as "Solutions to Exercises"

**RENAME SHEET1 AS "Basic Concepts".In this sheet copy the following table and >**

EMP CODE	NAME	DEPT	DESIGN	BASIC	SAIDA	HRA	TOTAL
		ACCN		3000			
		ACCN		4000			
		SALES		1500			
		SALES		3000			
		ACCN		1650			
		SALES		1560			
		PROD		3000			
		ADMIN		1750			
		PROD		3000			
		SALES		1575			
		ACCN		4000			
		ACCN		2000			
		SALES		3000			
		PROD		5000			
		ACCN		4000			

1.Insert an autofill series for the employee code in the format A01,A02.... Etc

2.Generate a list of the employees working in your organisation, in the same order **automatically** by taking the names of the employees from the list below. Copy the names in the same order as they are listed below.

Deepak Inderjit Arun Tarun George Nirmala Rajan Naseer Arjun Saji

3. Under the Design Column,add a suitable validation in a manner that the entries can be either "manager","sr manager","executive" (note: the user should choose the design options from a drop down menu.he should not be allowed to make any other entry). Then insert the Designations in the following order for each of the employees:

Deepak Inderjit Arun Tarun George Nirmala Rajan Naseer Arjun Saji  
Manager Sr Manager Executive Manager Executive Executive Manager Executive Manager Executive

4.Format the DEPT column such that all the Similar depts have the same format

5.Insert the following comment against the Designation Column heading

Please choose the designations from the drop-down menu against each of the cells.

6.Create an AutoCorrect entry for your company name.Give the same as the Heading for this Salary statement.

8.Save the "Solutions to Exercises" file with a Password such that only you are allowed to access it.

9.Rename Sheet2 as " Dummy".Copy the updated data in "Basic Concepts sheet" and paste it in a manner that it replaces the existing data. (To check change the basic salary of Arun to 1750 and observe the changes.

10.Create **Cell Names** for each of the Column headings in the Above table. Using these Cell Names, in the **Dummy** sheet

and the Gross Salaries for all the Employees

11. Transpose the above table and paste it in the "Dummy Sheet"

Names from the list below:

*Kapil      Rahul      Saket      Sanjay      Geetha*

Manager", "executive" or "admin"

(Other entries nor should he be allowed to type)

*Kapil      Rahul      Saket      Sanjay      Geetha*

Sr Manager Executive Manager Executive Sr Manager

Any changes made to the original table will be reflected in the "Dummy" sheet

**Dummy Sheet**, calculate the Total Basic, Hra, DA



Rename Sheet 3 as "Functions" and derive solutions for the following queries:

### CALCULATING ESTIMATES

You have received an enquiry for the supply of open storage tanks of one metre diameter.  
You have to estimate the cost and prepare quotations with the details given below.

Consider the Table given below:

Drawing no: AAB/PROJ/PL2/EQP3/ASS1

Material requirement for the tank of one metre diameter:

SLNO	ITEM/MATERIAL	Wt (kg)	Wastage allowance
			0.1
1	ms sheet 4mm	109	
2	ms p1 6 mm	41	
3	ms p1 10mm	4	
4	ms p1 10mm	0.8	
TOTAL MATERIAL COST			

Material cost@ Rs.20/kg.

### QUESTION A

1. Calculate wastage at 10% on the relevant weights for each material/ITEM and enter it in the
2. Calculate total weight by adding weight and wastage allowance for each material/ITEM in t
3. Open a new column and calculate the cost by multiplying TOTAL WEIGHT COLUMN with t
- Rename this column as "COST"
4. Calculate the TOTAL MATERIAL COST FOR ALL THE ITEMS/MATERIALS

### QUESTION B

1. Calculate the following:(PRINT RESULTS IN THE SHADED GREEN AREAS)

#### CONVERSION COST

a. Shell Rolling Cost

=(TOTAL WT. OF ITEM 1 \* Rs 3/kg)

b. LEG CUTTING/EDGE PREPARATION/WELDING COST

=(TOTAL WT. OF ITEM 2,3,4 \* Rs 3/kg)

c. WELDING COST:

8 MAN HOURS\* Rs 25/hr

d. DRILLING/ASSEMBLY/PAINTING

500

TOTAL CONVERSION COST

### QUESTION C

BOUGHT OUT COMPONENTS

1.VALVE

=4\* Rs 100

2.LEVEL GAUGE

=4\* Rs 1000

TOTAL BOUGHT OUT COMPONENTS

## QUESTION D

### CONSOLIDATION

1 RAW MATERIAL COST

0

(PRINT TOTAL MATERIAL COST VALUE FROM QUESTION A USING PASTE SPECIAL)

2 LABOUR CHARGES

(PRINT TOTAL CONVERSION COST VALUE FROM QUESTION B USING PASTE SPECIAL)

3 BOUGHT OUT COMPONENTS

(PRINT TOTAL BOUGHT OUT COST VALUE FROM QUESTION C USING PASTE SPECIAL)

4 CONSOLIDATED TOTAL

=RAW MATERIAL COST+LABOUR CHARGES+BOUGHT OUT COMPONENTS

## QUESTION E

Calculate the following:

1 ADMIN

=30% \* CONSOLIDATED TOTAL

2 COMMISSION

=5% \* CONSOLIDATED TOTAL

3 NEGOTIATION MARGIN

=10% \* CONSOLIDATED TOTAL

4 TOTAL QUOTE

=ADMIN+COMMISSION+NEGOTIATION+CONSOLIDATED TOTAL

Total wt.	COST
(kg)	

» WASTAGE ALLOWANCE COLUMN  
 he TOTAL WEIGHT COLUMN.  
 he MATERIAL COST





Sl No	Name	Month	Account	Sales
1.	Wilson	May	BCD Corp	35000

Sl No	Name	Month
17.	Benedict	July

--	--	--	--	--

		July Max
--	--	----------

2.	Lorenzo	May	Rosebud C	45000

12.	Benedict	June

--	--	--	--	--

		June Max
--	--	----------

3.	Wilson	May	Gen Corp	26000

7.	Benedict	May

4.	Benedict	May	OH Assoc	78000

4.	Benedict	May

--	--	--	--	--

		May Max
--	--	---------

5.	Horwitz	May	World Inc	55000

15.	Horwitz	July



6.	Wilson	May	Rosebud C	68000

18.	Horwitz	July	

--	--	--	--	--

		July Max
--	--	----------

7.	Benedict	May	BCD Corp	95000

10.	Horwitz	June

8.	Lorenzo	May	World Inc	15000

13.	Horwitz	June

--	--	--	--	--

		June Max
--	--	----------

9.	Lorenzo	June	Gen Corp	20000

5.	Horwitz	May

--	--	--	--	--

		May Max
--	--	---------

10.	Horwitz	June	BCD Corp	37000

19.	Lorenzo	July



--	--	--	--	--

		July Max
--	--	----------

11.	Wilson	June	Gen Corp	40000

9.	Lorenzo	June

12.	Benedict	June	Rosebud C	36000

14.	Lorenzo	June

--	--	--	--	--

		June Max
--	--	----------

13.	Horwitz	June	World Inc	14000

2.	Lorenzo	May

14.	Lorenzo	June	OH Assoc	55000

8.	Lorenzo	May

--	--	--	--	--

		May Max
--	--	---------

15.	Horwitz	July	BCD Corp	65000

16.	Wilson	July



--	--	--	--	--

		July Max
--	--	----------

16.	Wilson	July	OH Assoc	80000

11.	Wilson	June

--	--	--	--	--

		June Max
--	--	----------

17.	Benedict	July	Rosebud C	72500

1.	Wilson	May

18.	Horwitz	July	Gen Corp	66000

3.	Wilson	May

19.	Lorenzo	July	World Inc	125000
-----	---------	------	-----------	--------

6.	Wilson	May
----	--------	-----

May Max  
Grand Max

### Highest sales month-wise for each month

Sl No	Name	Month	Account	Sales
1.	Wilson	May	BCD Corp	35000
2.	Lorenzo	May	Rosebud C	45000
3.	Wilson	May	Gen Corp	26000
4.	Benedict	May	OH Assoc	78000
5.	Horwitz	May	World Inc	55000
6.	Wilson	May	Rosebud C	68000
7.	Benedict	May	BCD Corp	95000
8.	Lorenzo	May	World Inc	15000
9.	Lorenzo	June	Gen Corp	20000
10.	Horwitz	June	BCD Corp	37000
11.	Wilson	June	Gen Corp	40000
12.	Benedict	June	Rosebud C	36000
13.	Horwitz	June	World Inc	14000
14.	Lorenzo	June	OH Assoc	55000
15.	Horwitz	July	BCD Corp	65000
16.	Wilson	July	OH Assoc	80000
17.	Benedict	July	Rosebud C	72500
18.	Horwitz	July	Gen Corp	66000
19.	Lorenzo	July	World Inc	125000

Account	Sales
Rosebuds Co	72500
Rosebuds Co	72500



	72500
--	-------

Rosebud Co	36000
Rosebud Co	36000

	36000
--	-------

BCD Corp	95000
BCD Corp	95000

OH Assoc	78000
OH Assoc	78000

	95000
--	-------

BCD Corp	65000
BCD Corp	65000

Gen Corp	66000
Gen Corp	66000



	66000
--	-------

BCD Corp	37000
BCD Corp	37000

World Inc	14000
World Inc	14000

	37000
--	-------

World Inc	55000
World Inc	55000

	55000
--	-------

World Inc	125000
World Inc	125000

	125000
--	--------



Gen Corp	20000
Gen Corp	20000

OH Assoc	55000
OH Assoc	55000

	55000
--	-------

Rosebud Co	45000
Rosebud Co	45000

World Inc	15000
World Inc	15000

	45000
--	-------

OH Assoc	80000
OH Assoc	80000

	80000
--	-------



Gen Corp	40000
Gen Corp	40000

	40000
--	-------

BCD Corp	35000
BCD Corp	35000

Gen Corp	26000
Gen Corp	26000

Rosebud C	68000
Rosebud C	68000
	68000
C	125000



Rename Sheet 4as "Filters" and derive solutions for the following queries:

### QUESTION A

Sl No	Name	Month	Account	Sales
1.	Wilson	May	BCD Corp	35000
2.	Lorenzo	May	Rosebud Corp	45000
3.	Wilson	May	Gen Corp	26000
4.	Benedict	May	OH Assoc	78000
5.	Horwitz	May	World Inc	55000
6.	Wilson	May	Rosebud Corp	68000
7.	Benedict	May	BCD Corp	95000
8.	Lorenzo	May	World Inc	15000
9.	Lorenzo	June	Gen Corp	20000
10.	Horwitz	June	BCD Corp	37000
11.	Wilson	June	Gen Corp	40000
12.	Benedict	June	Rosebud Corp	36000
13.	Horwitz	June	World Inc	14000
14.	Lorenzo	June	OH Assoc	55000
15.	Horwitz	July	BCD Corp	65000
16.	Wilson	July	OH Assoc	80000
17.	Benedict	July	Rosebud Corp	72500
18.	Horwitz	July	Gen Corp	66000
19.	Lorenzo	July	World Inc	125000

### QUESTION B

The following table shows the distribution of the major subjects taken by students of various ethnic groups. The aim of this table is to analyse the popularity of some of the majors.

sl.no	Gender	Age	Ethnicity	Planned major	Category
1	male	18	white	business	business
2	male	18	white	electrical engineering	engineering
3	male	19	white	biology	natural science
4	male	18	white	maths	math
5	male	19	white	computer science	computer science
6	male	19	white	computer science	computer science
7	male	20	white	graphic design	fine and performing art
8	male	19	hispanic	secondary education	education
9	male	20	african-american	business	business
10	male	19	african-american	political science	social science
11	female	22	white	business	business
12	female	19	white	french	humanities
13	female	18	white	anthropology	social science
14	female	19	white	english	humanities
15	female	20	white	elementary education	education
16	female	21	white	computer science	computer science
17	female	19	african-american	secondary education	education
18	female	21	asian	early childhood education	education

19	female	19	hispanic	english	humanities
20	female	22	african-american	political science	social science
21	male	19	white	theatre	fine and performing art
22	male	19	hispanic	communications	humanities

Using Advanced Filters obtain the following filtered records:

- Create a criteria range that displays the details of "african-american" ethnic groups who have majored
- Create a criteria range that displays the details of all "whites" who are majoring in either "business" c
- Create a criteria range that displays the details off all "male " "whites" who are studying under the cat
- Create a criteria range that displays the details of all students above 18 who are majoring in " graphic
- Create a criteria range that displays the details of all students of all students who are between 20 and
- Create a criteria range that displays the details of all "females" majoring in either "english" or "theatr

Answer a

sl.no	Gender	Age	Ethnicity	Planned major	Category
10	male	19	african-american	political science	social science
20	female	22	african-american	political science	social science

Answer b

sl.no	Gender	Age	Ethnicity	Planned major	Category
1	male	18	white	business	business
5	male	19	white	computer science	computer science
6	male	19	white	computer science	computer science
11	female	22	white	business	business
16	female	21	white	computer science	computer science

Answer c

sl.no	Gender	Age	Ethnicity	Planned major	Category
1	male	18	white	business	business
2	male	18	white	electrical engineering	engineering
3	male	19	white	biology	natural science
4	male	18	white	maths	math
5	male	19	white	computer science	computer science
6	male	19	white	computer science	computer science
7	male	20	white	graphic design	fine and performing art
8	male	19	hispanic	secondary education	education
9	male	20	african-american	business	business
10	male	19	african-american	political science	social science
11	female	22	white	business	business
12	female	19	white	french	humanities
13	female	18	white	anthropology	social science
14	female	19	white	english	humanities
15	female	20	white	elementary education	education
16	female	21	white	computer science	computer science
17	female	19	african-american	secondary education	education
18	female	21	asian	early childhood education	education
19	female	19	hispanic	english	humanities
20	female	22	african-american	political science	social science



21	male	19	white	theatre	fine and performing art
22	male	19	hispanic	communications	humanities

Answer d

sl.no	Gender	Age	Ethnicity	Planned major	Category
5	male	19	white	computer science	computer science
6	male	19	white	computer science	computer science
7	male	20	white	graphic design	fine and performing art
16	female	21	white	computer science	computer science

Answer e

sl.no	Gender	Age	Ethnicity	Planned major	Category
7	male	20	white	graphic design	fine and performing art
9	male	20	african-american	business	business
11	female	22	white	business	business
15	female	20	white	elementary education	education
16	female	21	white	computer science	computer science
18	female	21	asian	early childhood education	education
20	female	22	african-american	political science	social science

Answer f

sl.no	Gender	Age	Ethnicity	Planned major	Category
14	female	19	white	english	humanities
19	female	19	hispanic	english	humanities

Total gross salary of all the employess in HR only

Total gross salary of managers only

No. of people in sales only

No.of people with the rating above 12.

Use Auto Filters to get the following results(Paste the results in a dif

- a.The details of Wilson
- b.The details of Lorenzo for May
- c.The details of Benedict and Horwitz for the month of June and July
- d.The details of clients whose sales is in the range of 50,000 to 1,50,
- e.Accounts of Rosebud Corp and Gen Corp
- f.Accounts of Lorenzo and Horwitz where the sales amount is greater

ups.The main

College
business
engineering
arts and sciences
arts and sciences
arts and sciences
arts and sciences
arts and sciences
education
business
arts and sciences
business
arts and sciences
arts and sciences
arts and sciences
education
arts and sciences
education
education

sl.no	Gender	Age	Ethnicity	Planned	Category
	female			english	
				theatre	

arts and sciences
arts and sciences
arts and sciences
arts and sciences

d in " political science".  
or "computer science"  
tegory of "fine and performing arts"  
: design"or are majoring in "computer science"  
22 years old  
e"

College
arts and sciences
arts and sciences

College
business
arts and sciences
arts and sciences
business
arts and sciences

College
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College
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business
business
education
arts and sciences
education
arts and sciences

College
arts and sciences
arts and sciences

ferent location)

000

· *than 50,000.*

College





**Question B**

Using SUMIF, evaluate the following:

InvoiceNum	Office	Amount	DateDue	Today	Difference
AG-0145	Oregon	\$5,000.00	2-Apr	6-May	-34
AG-0189	California	\$450.00	20-Apr	6-May	-16
AG-0220	Washington	\$3,211.56	29-Apr	6-May	-7
AG-0310	Oregon	\$250.00	1-May	6-May	-5
AG-0355	Washington	\$125.50	5-May	6-May	-1
AG-0409	Washington	\$3,000.00	11-May	6-May	5
AG-0581	Oregon	\$2,100.00	24-May	6-May	18
AG-0600	Oregon	\$335.39	24-May	6-May	18
AG-0602	Washington	\$65.00	29-May	6-May	23
AG-0633	California	\$250.00	31-May	6-May	25
TOTAL					

Total **no of days** past due days -63

Total amount past due **days** 9037.06

Total **amount** for Oregon only \$7,685.39

Total **amount** for all except Oregon 7102.06

Total amount with due date beyond Apri 6125.89





Rename Sheet 5 as "Multiple" and derive solutions for the following queries:

## QUESTION A EMPLOYEE SALARY STATEMENT

Consider the following salary statement of ABC LTD.,

current date

**CURRENT DATE=31ST DECEMBER 1999**

Name	Annual Salary	Monthly Salary	Location	Date Hired
James Brackman	\$42,400		New York	03/01/98
Michael Prenthal	\$20,900		New York	04/16/97
Francis Jenikins	\$67,700		Arizona	11/12/98
Peter Yates	\$19,950		Arizona	04/05/99
Walter Franklin	\$43,000		Arizona	03/28/99
Louise Victor	\$48,500		Conneticut	07/05/97
Sally Rice	\$24,500		New York	06/16/97
Charles K. Barkley	\$52,000		Conneticut	09/09/98
Melinda Hindquest	\$102,000		New York	06/04/97
Linda Harper	\$24,000		Arizona	02/16/99

1. Calculate the MONTHLY SALARY for each employee as

**MONTHLY SALARY=ANNUAL SALARY/12**

2. Format the Table so as to represent all employees from the similar locations according to the following rule:

LOCATION	FORMAT
New York	Bold Italic, Dark red
Arizona	Bold Italic, Dark Green
Conneticut	Bold Italic, Dark blue

3. Calculate the WORK EXPERIENCE of each employee as

**WORK EXPERIENCE=CURRENT DATE-DATE HIRED**

NOTE: FORMAT THE EXPERIENCE COLUMN TO DISPLAY AS NUMBER WITH A SINGLE DIGIT

4. Assign a category to each employee on the following rule:

- a. IF Experience is less than or equal to 2 years, then category="JUNIOR"
- b. IF Experience is greater than 2 years, then category="SENIOR"

4. Calculate the Income Tax for each employee as follows

- a. if the ANNUAL SALARY IS LESS THAN OR EQUAL TO \$50,000, THEN TAX=10%
- b. if the ANNUAL SALARY IS BETWEEN \$50,000 TO \$ 80,000, THEN TAX=15%
- c. if the ANNUAL SALARY IS GREATER THAN OR EQUAL TO \$80,000, THEN TAX=20%

## QUESTION B

1. Calculate the Total Annual Salary Location-wise and the Maximum Performance Ratio for each Location

2. Consider the following Table. Return the missing details in this report by referring to the following rule:

Name	Michael Prenthal	Louise Victor	Mathews	Melinda Hindquest
Department	Production	Sales	Production	Sales
Designation	Executive	Manager	Sr Manager	CEO
Location	???	???	???	???

### QUESTION C

Sl. No	Name	Age	Height (in cms)	Weight (in kgs)	Qualification
1.	Ravi B. S		21	157	55 GR
2.	Shanker		19	161	60 PGR
3.	Arun Kumar		20	163	59 P.U.C
4.	Praveen Sharma		22	161	62 PGR
5.	Ahmed R.		23	165	62 GR
6.	Sebastian D'Souza		20	170	63 P.U.C
7.	Gautam Kapoor		22	162	64 GR
8.	Kiran Patil		23	163	63 PGR
9.	Mahesh Gupta		25	164	62 GR
10.	Dinesh Kumar		22	165	61 P.U.C

The above is a database of applicants for recruitment in the Defense Forces. The Selection process is as follows:

Test 1 : The candidate's age should be 21 or above.

Test 2 : The candidate's age should be 21 or above and his height should be above 161 cms.

Test 3 : The candidate's age should be 21 or above, his height should be above 161 cms and his weight should be above 160 kgs.

Test 4 : The candidate's age should be 21 or above, his height should be above 161 cms , his weight should be above 160 kgs and his qualification should be PGR or above.

a. You are to do the following :

Ø Enter the given data into an Excel Spreadsheet.

Ø Create a Column for each test. Enter the IF Function so as to display a YES for candidates who qualify and a NO for those who do not.

Ø Copy the formulae for all the candidates.

08/19/2005    12/31/1999

Exempt	Performance Rating	Experience	Category	RANK	Income Tax
FALSE		7		1	
FALSE		6		2	
TRUE		8		1	
FALSE		9		0	
FALSE		8		0	
FALSE		5		2	
FALSE		6		2	
FALSE		7		1	
TRUE		5		2	
FALSE		8		0	

ding to the following colour combinations

FILE DECIMAL POINT.

NIOR"

HEN INCOME TAX IS ZERO  
INCOME TAX IS 20% OF ANNUAL SALARY  
10, THEN INCOME TAX=30% OF ANNUAL SALARY

ng Location-wise

o the Master table (USE VLOOKUP/HLLOKUP)

Linda Harper
Production
Executive
???

Test 1	Test2	Test3	Test4
y		n	n
n		n	n
n		n	n
y		n	n
y		y	y
n		n	n
y		y	y
y		y	y
y		y	y
y		y	n

Process consists of four eligibility tests for which criteria is given.

3

his weight should 60 kgs or above.

weight should 60 kgs or above and he should be either a Graduate (GR) or a PostGraduate (PGR).

For the eligible candidates and a NO for the candidates who are not eligible.

Insert a new sheet and Rename this Sheet as "Logic Practice-1" and derive solutions for the

On the basis of the pricing fixed below, arrive at the sales price for each of the gallons

Olive Oil Logic - 1

Cost/gallon for the first 500 gallons: \$23

Cost/gallon for gallons above 500: \$20

Number of gallons:

10

23

230

483

23

11109

500

20

10000

1600

20

32000



the following query:

in sales made below:



Logic Used for the Olive Oil  
Problem in the Proficiency  
Exercises

Insert a new sheet and Rename this Sheet as "Grade evaluation" and derive solutions for the following c

Consider the following table where the marks scored by the students have been listed below:  
On the basis of the scores, obtained assign the grades to each of the students.

Student Name	Score	Grade
Deepak	45	Err:508
Inderjit	90	
Arun	78	
Tarun	52	
George	63	
Nirmala	68	
Rajan	69	
Naseer	64	
Arjun	52	
Saji	31	
Kapil	35	
Rahul	63	
Saket	68	
Sanjay	66	
Geetha	100	
Raghav	58	

score	grade
<=35	d
35-60	c
60-85	b
>=85	a



query:

Insert a new sheet and Rename this Sheet as "Logic Practice-2" and derive solutions for the

On the basis of the pricing fixed below, arrive at the sales price for each of the gallon :

**Olive Oil Logic - 2**

Cost/gallon for the first 500 gallons: **\$23**  
Cost/gallon for the next 500 gallons: **\$20**  
Cost/gallon for gallons >1,000: **\$15**

Number of gallons:

<b>1,600</b>	30500
<b>483</b>	11109
<b>2001</b>	36515



Logic  
Probl


following query:

sales made below:

Used for the Olive Oil  
em in the Proficiency  
Exercises

Data	dummy	One instance of each value Unique values
1	FALSE	
1	FALSE	
1	TRUE	
2	TRUE	
3	TRUE	
4	FALSE	
4	FALSE	
5	FALSE	
6	FALSE	
7	FALSE	
8	FALSE	

Data

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

Data	Data
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

## Benefit Calculations

Write formulas to calculate the **Retirement Contribution** and **Health Plan Cost** for each employee.

Name	Employment Status	Health Plan	Salary	Hire Date	# Years Employed	Retirement Contribution	Health Plan Cost
Gopnik	part time	family	\$45,000	Jan-98	5		10000
Mahfouz	full time	family	\$120,000	May-89	13		10000
Bryson	full time	individual	\$145,000	Mar-01	2		8000
Peters	full time	individual	\$100,000	Nov-00	2		8000
deVries	full time	individual	\$115,000	Jul-97	5		8000
Talento	part time	family	\$55,000	Aug-95	7		10000
Yang	full time	other plan	\$95,000	Apr-99	4		0
Marks	part time	family	\$15,000	May-01	1		10000
Heller	full time	family	\$124,000	Oct-00	2		10000

### The Retirement Contribution Calculation Instructions

The company contributes to each eligible employee's retirement plan at the rate of 4% of the employee's annual salary. However, to be eligible for this benefit, an employee must have full-time status with two or more years of employment. A calculation for the retirement contribution requires a test of two conditions: Full- or part-time status and number of years of employment.

### The Health Plan Cost Calculation Instructions

The company supplies two health plan options:

- Up to \$10K of annual coverage for employees who choose the family plan.
- Up to \$8K of annual coverage for employees who choose the individual plan.

These benefits do not apply if the employee or employee-and-family are already covered by some other health plan. A calculation for health insurance requires a test of three conditions: Individual, Family, Already Covered.

Rename Sheet 6 as "Database Functions" and derive solutions for the following queries:

The following illustration shows a database for a small orchard. Each record contains information about a

Tree	Height	Age	Yield	Profit
Apple	18	20	14	105
Pear	12	12	10	96
Cherry	13	14	9	105
Apple	14	15	10	75
Pear	9	8	8	76.8
Apple	8	9	6	45

Tree	Height	Age	Yield
------	--------	-----	-------

Apple

Tree	Height	Age	Yield
------	--------	-----	-------

Apple >10

Tree	Height	Age	Yield
------	--------	-----	-------

Apple >10

Using the Appropriate function return the following details

1. Furnish details of the number of apple trees whose height ranges between 10 and 16 units.
2. calculate the highest profit between apple and pear trees
3. Calculate the least profit of those apple trees over 10 years old
4. Calculate the Total Profit from Apple Trees
5. Calculate the Total Profit from apple trees with a height between 10 and 16 units
6. Calculate the product of the yields from apple trees aged above 10 years
7. Calculate the average yield of all apple trees over 10 feet in height.

1 Err:504  
2 105  
3 75  
4 225  
5 75  
6 140  
7 12

Tree	Height	Age	Yield	Profit
Apple		>10		

one tree.

Profit
--------

Profit
--------

Profit	Height
	<16

1  
105  
75  
225  
75  
140  
12

**Rename Sheet 7 as "Consolidate" and derive solutions for the following queries:**

The following are reports for 1992 and 1993 sales for the Eastern and Western regions of a tour company.

Eastern 1992				
	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Golf	5,000	2,000	1,500	2,000
Safari	9,000	6,000	4,000	5,000
Tennis	1,500	500	600	1,500
Total Sales	15,500	8,500	6,100	8,500

Western 1992				
	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Windsurfing	1,800	5,000	6,500	1,750
Golf	3,500	2,500	6,430	4,590
Tennis	6,000	3,200	4,070	5,000
Total Sales	11,300	10,700	17,000	11,340

Eastern 1993				
	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Golf	5,500	1,500	1,400	2,500
Safari	10,000	6,500	4,400	4,500
Tennis	1,000	800	550	1,000
Total Sales	16,500	8,800	6,350	8,000

Western 1993				
	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Windsurfing	1,850	4,000	5,500	1,550
Golf	1,500	2,500	4,075	2,500
Tennis	6,500	2,000	4,590	5,055
Total Sales	9,850	8,500	14,165	9,105

**Use the Consolidate to obtain a total of the above data.**

**Link the Consolidated data to the source data such that if a change is made in the source data, the Consolidated data is updated.**



mpany.

**e data this is reflected in the report.**

## Advanced Filters solutions

sl.no	Gender	Age	Ethnicity	Planned major	Category
			african-american	political science	

sl.no	Gender	Age	Ethnicity	Planned major	Category
			white	business	
			white	computer science	

sl.no	Gender	Age	Ethnicity	Planned major	Category
	male			white	fine and performi

sl.no	Gender	Age	Ethnicity	Planned major	Category
		>18		computer science	
		>18		graphic design	

sl.no	Gender	Age	Ethnicity	Planned major	Category
		>=20			

sl.no	Gender	Age	Ethnicity	Planned major	Category
	female			english	
	female			theatre	

## Pivot table Question A Solution

page	row
1 Ethnic groups	Planned majors Gender
2 Gender	Planned majors Ethnicity Age
3 College	Gender Planned majors Ethnicity
4 College	Ethnicity
5 College	Category

**Question c**

<b>1 Desgn</b>	<b>Dept</b>
<b>2</b>	<b>Dept</b>
<b>3 Desgn</b>	<b>Dept,emp</b>
<b>4</b>	<b>Dept,Desgn</b>
<b>5 Dept</b>	<b>Desgn</b>

College

College

College

ing art

College

College Age  
≤22

College

col	data
	Count of sl no
	count of sl no
	Count of sl no
	Max age
	max age

**Max annd min Gross sala**

**Max rating**

**Average Gross**

**Min Rating**

**Count of SI no**

Rename Sheet 9 as "Pivot Table" and derive solutions for the following queries:

### QUESTION A

The following table shows the distribution of the major subjects taken by students of various aim of this table is to analyse the popularity of some of the majors.

sl.no	Gender	Age	Ethnicity	Planned r	Category	College
1	male	18	white	business	business	business
2	male	18	white	electrical	engineering	engineering
3	male	19	white	biology	natural sc	arts and sciences
4	male	18	white	maths	math	arts and sciences
5	male	19	white	computer	computer	arts and sciences
6	male	19	white	computer	computer	arts and sciences
7	male	20	white	graphic define and p	arts and sciences	
8	male	19	hispanic	secondary	education	education
9	male	20	african-am	business	business	business
10	male	19	african-am	political s	social sci	arts and sciences
11	female	22	white	business	business	business
12	female	19	white	french	humanitie	arts and sciences
13	female	18	white	anthropolo	social sci	arts and sciences
14	female	19	white	english	humanitie	arts and sciences
15	female	20	white	elementar	education	education
16	female	21	white	computer	computer	arts and sciences
17	female	19	african-am	secondary	education	education
18	female	21	asian	early child	education	education
19	female	19	hispanic	english	humanitie	arts and sciences
20	female	22	african-am	political s	social sci	arts and sciences
21	male	19	white	theatre	fine and p	arts and sciences
22	male	19	hispanic	communic	humanitie	arts and sciences

1.Generate a Pivot Table report for each of the following

- Display which majors are most popular with men and women of different ethnic groups.
- Display which majors are most popular with various ethnic groups, of different age groups,
- Display which majors are most popular with men or women of different ethnic groups for e
- Display the maximum age group of students belonging to different ethnic groups from each
- Display the maximum age group of students belonging to different categories from each co

### QUESTION B

The Following data Represents the monthly expenses incurred by you.Consolidate the same in the *Column Field* of the report)

	Rent	Ec bill	Water bill	Provisionscable	self	
jan	5000	1000	250	3500	180	2500
feb	5000	700	200	2750	180	2500
march	5000	850	150	3000	180	2500
april	5000	650	260	2900	180	2500
may				1000		2000

	Rent	Ec bill	Water bill	Provisionscable	self	
may	5000	1000	250	2500	180	2500
june	5000	700	200	2750	180	2500
july	5000	850	150	3000		2500
august	5000	650	260	2900	180	2500
september	5000	700	260	3000	180	2500
october	5000	780	250	2800	180	2500
november	5000	790	243	3500	180	2500
december	5000	800	285	3200	180	2500
august					180	1500

### QUESTION C

slno	empname	dept	desgn	basic	hra	gross	rating
1	shanthi	hr	mgr	2563	1281.5	3844.5	5
2	aishwarya	hr	executive	4000	2000	6000	6
3	sandeep	sales	sr mgr	4000	2000	6000	4
4	simran	prod	executive	4000	2000	6000	8
5	veer	hr	mgr	3652	1826	5478	7
6	sachin	sales	sr mgr	4000	2000	6000	9
7	bin laden	prod	mgr	2589	1294.5	3883.5	6
8	ambani	hr	sr mgr	4000	2000	6000	8
11	brinda	prod	sr mgr	4000	2000	6000	4
12	deepak	prod	mgr	2365	1182.5	3547.5	5
13	vishnu	Qc	executive	2500	1250	3750	9
14	anand	stores	executive	2580	1290	3870	6
15	lokesh	prod	executive	2365	1182.5	3547.5	8
16	vijaya	Qc	sr mgr	4000	2000	6000	4
17	sreevidya	stores	mgr	3000	1500	4500	5
18	jasim	Qc	mgr	3000	1500	4500	8
19	venu	hr	sr mgr	4000	2000	6000	3

1. Maximum and Minimum Gross Salary for each Desgn,Dept-wise
2. Maximum Rating Department-wise
3. Average Gross Salary for each Designation,dept-wise,employee-wise
4. Least rating Department-wise,Desgn-wise
- 5.Number of people in each dept,desgn-wise

ethnic groups. The main


for each gender group(male/female)  
ach college.  
1 college.  
college.

into a single report using Pivot Tables(Do not keep any data





Rename Sheet 12 as "Charts" and derive solutions for the following queries:

## INCOME COMPARISON

Being the senior accounts executive of your company, it is your responsibility to make the year-end statements ready. This year there is an additional responsibility given to you.

You have been asked to prepare the income statement, showing the revenue, sales and operating expenses for the previous three years. Such a statement will show the figures for the three years, so that a realistic projection can be made for the current year.

The Format for the statement is as follows

### ABC LIMITED For the period 2000-2002 (Rs. In Lakhs)

REVENUE	2000	2001	2002
Gross Sales	70000	75000	90000
Sales Returns	20000	23000	28000
NET SALES	50000	52000	62000
COST OF SALES	2000	2001	2002
Beginning Inventory	35000	36000	42000
Goods Purchased	12000	16500	18500
Total Goods Available	47000	52500	60500
Ending Inventory	3600	4200	4350
Total cost of Goods Consumed	43400	48300	56150
Gross Profit	6600	3700	5850
OPERATING EXPENSES	2000	2001	2002
Selling	6200	7300	4600
General/Administrative	4450	5275	6000
Total Operating Expenses	10650	12575	10600
Income before Taxes	-4050	-8875	-4750
Taxes on Income	-1822.5	-3993.75	-2137.5
Net Profit	-2227.5	-4881.25	-2612.5

You are required to do the following

### QUESTION A

1. Calculate NET SALES using the formula:  $\text{NET SALES} = \text{GROSS SALES} - \text{SALES RETURN}$
2. Calculate TOTAL GOODS AVAILABLE by adding Beginning Inventory and Goods Purchased
3. Calculate TOTAL COST OF GOODS SOLD, using the formula:  

$$\text{TOTAL COST OF GOODS CONSUMED} = \text{TOTAL GOODS AVAILABLE} - \text{ENDING INVENTORY} + \text{BEGINNING INVENTORY}$$
4. Calculate GROSS PROFIT as:  

$$\text{GROSS PROFIT} = \text{NET SALES} - \text{TOTAL COST OF GOODS CONSUMED}$$
5. Calculate Total Operating Expenses by adding Selling and General/Administrative Expenses.
6. Calculate Income before Taxes as:  

$$\text{INCOME BEFORE TAXES} = \text{GROSS PROFIT} - \text{TOTAL OPERATING EXPENSES}$$
7. Calculate Taxes on Income as a percentage (45%) of Income before Taxes
8. Calculate NET PROFIT AFTER TAX by subtracting TAXES ON INCOME from INCOME BEFORE TAXES

## QUESTION B

**NOTE: Place the charts as an object in the same sheet where the solution to this question exists**

1. Create a Line chart to depict the Selling and General/administrative expenses for the the three
2. Create a Column chart to depict NET PROFIT VS GROSS PROFIT for the three years
3. Create a Pie chart to depict the NET PROFIT VS GROSS PROFIT for the year 2002

ending

he comparative

BLE-ENDING INVENTORY

TAX

years

Practice:

1. Create a Macro for **Conditional Formatting** on the basis of the following conditions

IF the cell value is negative then apply a red colour shading to your cell

IF the cell value is positive then apply a blue colour shading to your cell

IF the cell value is Zero then apply a Green colour shading to your cell.

2. Create the following function macro and run the macro on the following table

***Insert a new column called Income tax at the end of the table. Create a user defined***

Total<=10000,income tax=0

Total between 10000 to 30000,income tax=10% of total sal

Total >=30000, income tax=20% of total sal

slnno	empname	age	dept	desgn	basic	hra	da	gross
1	shanthi	25	hr	mgr	3000	1500	750	5250
2	aishwarya	26	hr	sr mgr	4000	2000	1000	7000
3	sandeep	28	sales	sr mgr	4000	2000	1000	7000
4	simran	26	prod	sr mgr	4000	2000	1000	7000
5	veer	24	hr	mgr	3000	1500	750	5250
6	sachin	29	sales	sr mgr	4000	2000	1000	7000
7	bin laden	26	prod	mgr	3000	1500	750	5250
8	ambani	25	hr	sr mgr	4000	2000	1000	7000
9	brinda	28	prod	sr mgr	4000	2000	1000	7000
10	deepak	30	prod	mgr	3000	1500	750	5250
11	anita	40	Qc	mgr	3000	1500	750	5250
12	sebastian	30	Qc	Executive	2000	1000	500	3500
13	leema	45	Qc	mgr	3000	1500	750	5250
14	vincent	24	Stores	mgr	3000	1500	750	5250
15	shantha	20	Stores	Executive	2000	1000	500	3500
16	david	45	Qc	sr mgr	4000	2000	1000	7000
17	manu	30	Qc	Executive	2000	1000	500	3500

*function to calculate the income tax as*

**Income Tax**

