

2

1. calculate salary statement on the criteria:

a) calculate DA based on following condition.

IF Basic < 20000 then

DA is 20% of Basic

if Basic \geq 20000 and Basic \leq 40000 then DA is 40% of Basic.

else, DA is 50% of Basic

b) HRA is 25% of Basic

$$= \text{Basic} * 25/100$$

c) MA is fix RS 500

d. PF is 25% of Basic

$$= \text{Basic} * 25/100$$

e) Net salary = (Basic + DA + HRA + MA) - PF

f) calculate maximum, minimum, Average for the Basic and Net salary.

\Rightarrow Maximum = $= \max(\text{Basic's total})$

Minimum = $= \min(\text{Basic's total})$

Average = $= \text{Average}(\text{Basic's total})$

g) count the NO. of Employee whose Net salary
if $>= 50000$

\rightarrow select all data \rightarrow go to data tool \rightarrow click on
condition = Net salary is $>= 50000$ \leftarrow standard filter \leftarrow filter

1

No	Emp. Name	Designation	Basic	DA	HRA	MA	PF	Net Sal.
1	Visat Kohli	Manager	45000	9000	11250	500	11250	54500
2	Shree Krishn	Manager	44000	8800	11000	500	11000	53300
3	Shree Ram	Clerk	35000	7000	8750	500	8750	42500
4	Mahadev	Clerk	30000	6000	7500	500	7500	36500
5	Hanuman	Clerk	32000	6400	8000	500	8000	38900

Basic		
Maximum	Minimum	Average
45000	30000	37200

Net salary		
Maximum	Minimum	Average
54500	36500	45140

* The No of Employees whose Net salary if ≥ 50000

No	Emp. Name	Designation	Basic	DA	HRA	MA	PF	Net Sal.
1	Visat Kohli	Manager	45000	9000	11250	500	11250	54500
2	Shree Krishn	Manager	48000	8800	11000	500	11000	53300

3. Create a database with following fields.

Customer	Product	Rate per quantity	Quantity
----------	---------	-------------------	----------

- a) Each customer purchase only 3 types of items i.e. PC, Laptop, tablet. Applied validation to enter this 3 values only.
- b) Quantity should be restricted to minimum 1 and maximum 50.
- c) Add one more column Total Amount, calculate amount of quantity purchased $\text{Quantity} * \text{Rate}$.
- d) Find the customer who purchased Laptop.

Ex:- Syntax : Select all data \rightarrow Go to the Data tool.
 Advanced filter \leftarrow in data go to the ^{filter}

Product	Advanced filter		
Laptop	- undefined	<input type="checkbox"/> select two cell	<input checked="" type="checkbox"/> OK
Last click to ok and show result	<input checked="" type="checkbox"/> copy results to - undefined	<input type="checkbox"/>	cancel Help More select those cell where you show result

e) find the customer who purchased PC with maximum total amount.

\rightarrow select all data \rightarrow Go to the Data tool \rightarrow click on select result \leftarrow result of PC \leftarrow Advanced filter \leftarrow filter
 \hookrightarrow go to filter \rightarrow standard filter \rightarrow condition = largest total amount

f) Display record of customer who purchase minimum quantity of tablets.

\rightarrow select all data \rightarrow Go to the Data tool \rightarrow click on filter select result \leftarrow result of tablet \leftarrow Advanced filter \leftarrow
 \hookrightarrow go to filter \rightarrow standard filter \rightarrow condition = smallest quantity of tablet.

3

No	Customer No.	Product	Rate Per Qua.	Quantity	Total Amount
1	Virat Kohli	PC	30000	40	1200000
2	Krishna	Laptop	45000	45	2025000
3	Ram	Tablet	25000	30	750000
4	Shiv	PC	35000	35	1225000
5	Hanuman	Laptop	50000	25	1250000
6	Vishnu	Tablet	20000	40	800000
7	Brahma	PC	25000	45	1125000
8	Dattatreya	Laptop	40000	50	2000000
9	Khodiyar	Tablet	20000	30	600000
10	Ganesh	Laptop	45000	35	1575000

Product Laptop → The customer who purchased Laptop.

No	Customer No.	Product	Rate Per Qua.	Quantity	Total Amount
2	Krishna	Laptop	45000	45	2025000
5	Hanuman	Laptop	50000	25	1250000
8	Dattatreya	Laptop	40000	50	2000000
10	Ganesh	Laptop	45000	35	1575000

→ The customer who purchased PC with maximum Total Amount.

Product	PC	No	Cust. Name	Product	Rate Per Qua.	Quantity	Total Amount
		1	Virat Kohli	PC	30000	40	1200000
		4	Shiv	PC	35000	35	1225000
		7	Brahma	PC	25000	45	1125000

No	Cust. Name	Product	Rate Per Qua.	Quantity	Total Amount
4	Shiv	PC	35000	35	1225000

→ The customer who purchase minimum quantity of tablets.

Product	Tablet	No	Cust. Name	Product	Rate Per Qua.	Quantity	Total Amount
		3	Ram	Tablet	25000	30	750000
		6	Vishnu	Tablet	20000	40	800000
		9	Khodiyar	Tablet	20000	30	600000

No	Cust. Name	Product	Rate Per Qua.	Quantity	Total Amount
6	Vishnu	Tablet	20000	40	800000

4

a) each employee must get minimum 7500 salary.

Apply proper validation

$$\rightarrow \text{salary} \geq 7500$$

b) Designation can have the following values only: Project manager, Programmer, Designer, Analyst

c) Add one more field column bonus.

d) calculate Gross salary

$$\rightarrow \text{Gross salary} = \text{salary} + \text{Bonus}$$

e) Deduct 10% PF of gross salary and obtain Net salary.

$$\rightarrow \text{PF} = \text{gross salary} * 10 / 100$$

$$\text{Net salary} = \text{Gross salary} - \text{PF}$$

f) display record of employee having designation as project manager and having lowest salary.

\rightarrow select all data \rightarrow go to data tool \rightarrow click to filter \rightarrow

select result \leftarrow result of Project \leftarrow Advanced filter \leftarrow

\hookrightarrow go to filter \rightarrow standard filter \rightarrow condition = smallest salary:

g) Display employee earning highest salary.

\rightarrow select all data \rightarrow go to data tool \rightarrow click to filter \rightarrow

condition = largest salary. \leftarrow standard filter \leftarrow

h) count total employee under each designation

\rightarrow select all data \rightarrow go to data tool \rightarrow click to filter \rightarrow

result of Programmer \leftarrow Advanced filter \leftarrow

Designer

Analyst

4

No	Emp. ID	Emp. No.	Designation	Salary	Bonus	Gross. Sal.	PF	Net Sal.
1	1801	A	Project man.	12000	3000	15000	1500	13500
2	1802	B	Project man.	11000	2500	13500	1350	12150
3	1803	C	Programmer	10500	2500	13000	1300	11700
4	1804	D	Programmer	10000	2000	12000	1200	10800
5	1805	E	Programmer	9500	1500	11000	1100	9900
6	1806	F	Designer	9000	1500	10500	1050	9450
7	1807	G	Designer	8500	1500	10000	1000	9000
8	1808	H	Designer	8000	1000	9000	900	8100
9	1809	I	Analyst	8500	1000	9500	950	8550
10	1810	J	Analyst	8000	1000	9000	900	8100

→ The employee having designation as project manager and Designation Project manager having lowest salary.

No	Emp. ID	Emp. No.	Designation	Salary	Bonus	Gross. Sal.	PF	Net Sal.
1	1801	A	Project man.	12000	3000	15000	1500	13500
2	1802	B	Project man.	11000	2500	13500	1350	12150

No	Emp. ID	Emp. No.	Designation	Salary	Bonus	Gross. Sal.	PF	Net Sal.
2	1802	B	Project man.	11000	2500	13500	1350	12150

→ The employee earning highest salary.

No	Emp. ID	Emp. No.	Designation	Salary	Bonus	Gross. Sal.	PF	Net Sal.
1	1801	A	Project man.	12000	3000	15000	1500	13500

→ Total employee under each designation.

Designation Programmer

No.	Emp. ID	Emp. No.	Designation	Salary	Bonus	Gross. Sal.	PF	Net sal.
3	1803	C	Programmer	10500	2500	13000	1300	11700
4	1804	D	Programmer	10000	2000	12000	1200	10800
5	1805	E	Programmer	9500	1500	11000	1100	9900

Designation Designer

No.	Emp. id	Emp. No.	Designation	Salary	Bonus	Gross. Sal.	PF	Net sal.
6	1806	F	Designer	9000	1500	10500	1050	9450
7	1807	G	Designer	8500	1500	10000	1000	9000
8	1808	H	Designer	8000	1000	9000	900	8100

Designation Analyst

9	1809	I	Analyst	8500	1000	9500	950	8550
10	1810	J	Analyst	8000	1000	9000	900	8100

- a) calculate total item and total price using formula
 → = sum(B2:E2) ← total item
 $\text{Total price} = \text{total item} * \text{price per unit}$
- b) calculate total item sold in particular region
 → Ex:- North India → = sum(addition of all products)
- c) Apply blue colour to those items where item sold greater than 1100.
 → using conditionally formatting and get result.
- d) Find out which item sold maximum in which region
 →
- e) Extract product information which sold minimum in central India.
 → select all data → go to Data tools → click on filter
 ↴ condition = smallest in ← standard filter ↴
 central India
 show result.

6

Product	North India	South India	Central India	East India	Price Per Unit	Total Item	Total Price
TV	250	300	450	500	10000	1500	15000000
AC	200	400	475	150	25000	1225	30625000
Fridge	400	650	500	100	20000	1650	33000000
Mobile	300	175	250	475	15000	1200	18000000
Laptop	200	225	300	100	30000	825	24750000
PC	400	350	150	120	20000	1020	20400000
Ball	250	250	325	190	5000	1015	5075000
Tablet	350	150	425	160	7000	1085	7595000
Painter	225	200	225	300	10000	950	9500000
Bat	175	300	175	225	12000	875	10500000

→ Total item sold in particular regions

North India	South India	Central India	East India
2750	3000	3275	2320

→ Product information which sold maximum in central india.

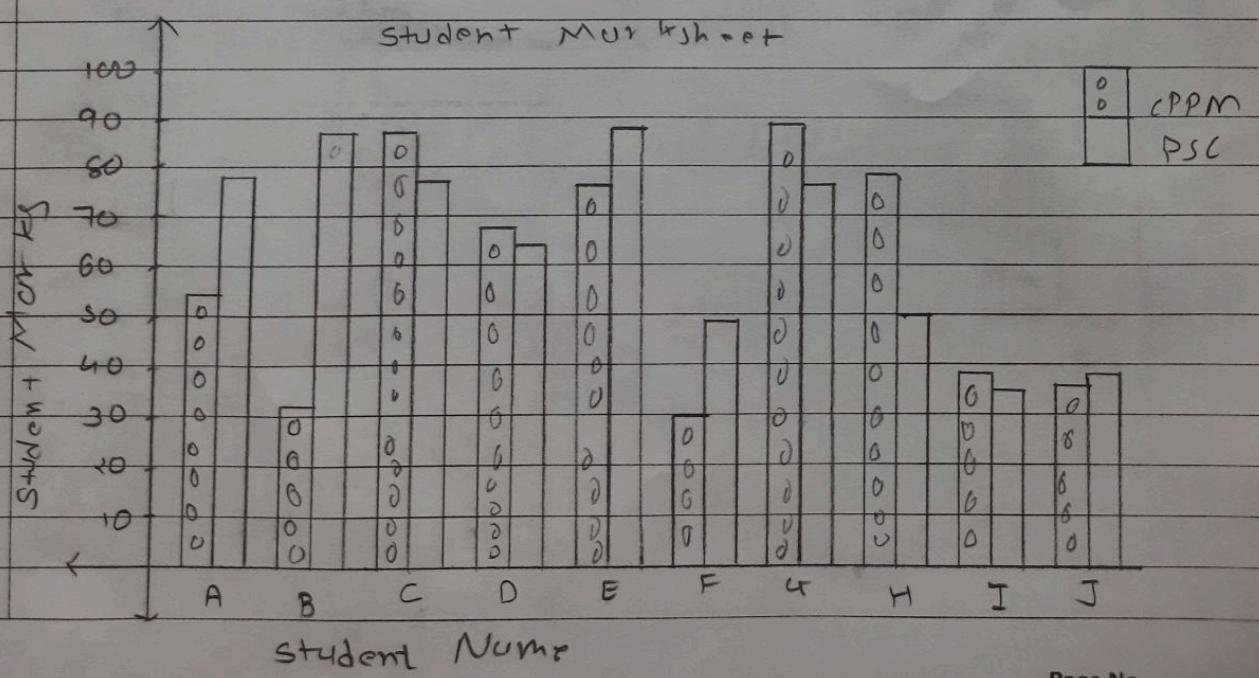
Product	North India	South India	Central India	East India	Price Per Unit	Total Item	Total Price
Fridge	400	650	500	100	20000	1650	33000000
PC	400	350	150	120		1020	20400000

8

a) calculate total of each student
 $\rightarrow = \text{sum}(\text{all marks addition})$

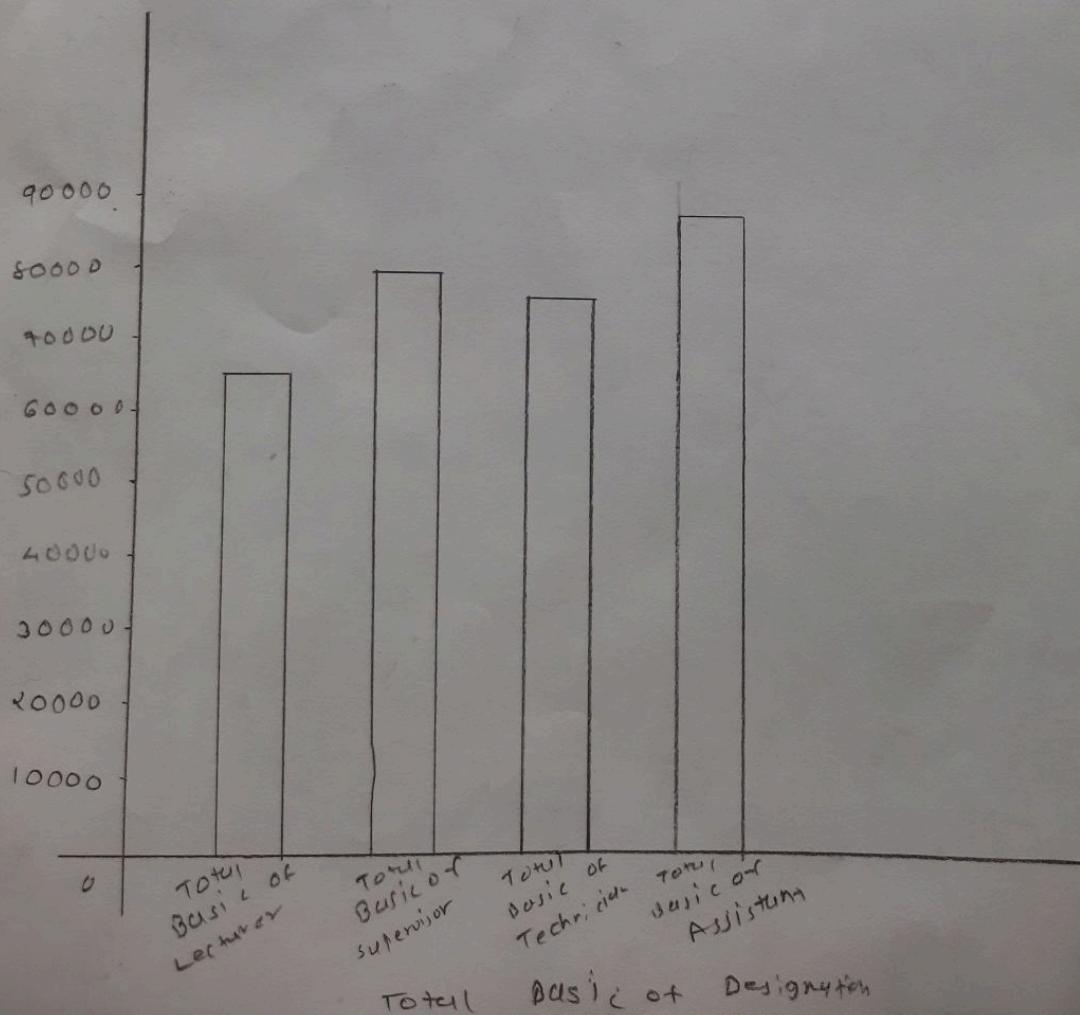
b) Find RESULT

If marks is any subject is less than 35 then,
 $\text{result} = \text{'Fail'}$, $\text{result} = \text{'Pass'}$
 $\rightarrow = \text{If}(\text{And}(C3 > 35; D3 > 35; E3 > 35); \text{"Pass"}; \text{"Fail"})$



Name	Course	IC	CPPM	PSC	Total	Result	Average	Grade
A	B.Sc	80	55	78	213	Pass	71	Distinction
B	M.C.A.	58	32	87	177		59	Fail
C	B.C.A.	45	88	77	210	Pass	70	Distinction
D	M.C.A.	78	66	63	207	Pass	69	First class
E	M.C.A.	89	75	88	252	Pass	84	Distinction
F	B.Sc	56	30	49	135		45	Fail
G	B.C.A.	78	89	76	243	Pass	81	Distinction
H	B.C.A.	67	78	50	195	Pass	65	First class
I	M.C.A	40	38	36	114	Pass	38	Pass class
J	B.C.A.	84	36	39	159	Pass	53	Second class

Program No-20+ h's chart



a) Extract records of which D.O.J is between 01/09/07 and 01/09/08.

→

b) sort the records according of Basic

c) Extract records for whom Designation is Lecturer and have basic > 12000

→ Select all data → go to data tool → click on filter
 select result ← result of data ← Advancedfilter ←
 ↳ go to data tool → click on filter → standard
 condition = basic > 12000 ← filter

d) Extract records for Designation Technician and date of Joining < 01/09/07.

→ select all data → go to data tool → click on filter
 select result ← result of data ← Advanced filter ←
 ↳ go to data tool → click on filter → standard
 condition = date of joining < 01/09/07 ← filter

e) Do subtotal of Basic on Designation

→ Total Basic of Lecturer = sum(all lecturer's basic's addition)

→ Total Basic of supervisor = sum(all supervisor's basic's addition)

→ Total Basic of Technician = sum(all Technician's basic's addition)

→ Total Basic of Assistant = sum(all Assistant's basic's addition)

10.

Emp. no	Emp. No.	Designation	Date of Join.	Basic
2	B	Lecturer	09-01-08	10000
3	C	Lecturer	09-01-06	11000
4	D	Lecturer	09-01-09	12000
12	L	Technician	09-01-06	13000
8	H	Supervisor	09-01-10	13500
5	E	Lecturer	09-01-07	14000
13	M	Technician	09-01-07	14000
9	I	Supervisor	09-01-08	14500
1	A	Lecturer	09-01-07	15000
6	F	Supervisor	09-01-09	15000
15	O	Technician	09-01-08	15000
20	T	Assistant	09-01-07	16000
18	R	Assistant	09-01-10	16500
7	G	Supervisor	09-01-10	17000
11	K	Technician	09-01-09	17000
14	N	Technician	09-01-10	17000
19	S	Assistant	09-01-08	17000
17	Q	Assistant	09-01-09	17500
16	P	Assistant	09-01-10	18000
10	J	Supervisor	09-01-10	19000

→ Subtotal of Basic
on Designation.

Total Basic of Lecturer	62000 59500
Total Basic of Supervisor	79000 72500
Total Basic of Technician	76000 81500
Total Basic of Assistant	85000 88500

Designation		lecturer		
No	Name	Designation	D.O.J.	Basic
1	A	lecturer	09-01-07	15000
2	B	lecturer	09-01-08	10000
3	C	lecturer	09-01-06	11000
4	D	lecturer	09-01-09	12000
5	E	lecturer	09-01-07	14000

Designation		Technician		
No	Name	Designation	D.O.J.	Basic
11	K	Technician	09-01-09	17000
12	L	Technician	09-01-06	13000
13	M	Technician	09-01-07	14000
14	N	Technician	09-01-10	17000
15	O	Technician	09-01-08	15000

Designation		Supervisor		
No	Name	Designation	D.O.J.	Basic
6	F	Supervisor	09-01-09	15000
7	G	Supervisor	09-01-10	17000
8	H	Supervisor	09-01-10	13500
9	I	Supervisor	09-01-08	14500
10	J	Supervisor	09-01-10	19000

→ Lecturer have basic > 12000.

No	Name	Designation	D.O.J.	Basic
1	A	Lecturer	09-01-07	15000
5	E	Lecturer	09-01-07	14000

Designation		Assistant		
No	Name	Designation	D.O.J.	Basic
16	P	Assistant	09-01-10	18000
17	Q	Assistant	09-01-09	17500
18	R	Assistant	09-01-10	16500
19	S	Assistant	09-01-08	17000
20	T	Assistant	09-01-07	16000

→ Technician whose D.O.J. < 01-09-07

No	Name	Designation	D.O.J.	Basic
12	L	Technician	09-01-06	13000
13	M	Technician	09-01-07	14000

14

- * Discount is 5 % of price amount
Net price = Price - Discount
- * Extract records for which date of sales is between 01/01/01 and 01/01/02
- *
- *
- * Sort records according Item Name.
- * Extract records of Item Name = BREAD
 - select all Data → go to Duty tool → click on show result ← Advanced filter ← filter
- * Find the maximum , minimum and average for Rate and Net price.
 - maximum = $=\max(E2:E21)$
 - minimum = $=\min(E2:E21)$
 - Average = $=\text{Average}(E2:E21)$

Item Code	Item Name	Sales Date	Quantity	Rate	Discount	Net price
A18	BAT	01-01-01	50	2000	5.00%	1900
B18	BAT	02-01-01	60	5000	5.00%	4750
C18	BALL	25-03-03	55	6000	5.00%	5700
D18	STUMP	31-05-01	45	4500	5.00%	4275
E18	STUMP	31-05-02	40	3000	5.00%	2850
F18	BREAD	15-07-01	45	2500	5.00%	2375
G18	BREAD	24-06-05	85	3300	5.00%	3135
H18	BAT	28-06-01	95	4200	5.00%	3990
I18	BREAD	28-06-02	75	3800	5.00%	3610
J18	PURI	28-06-03	36	2800	5.00%	2660
K18	BAT	28-06-04	65	3900	5.00%	3705
L18	BREAD	28-06-05	60	2700	5.00%	2565
M18	ELVISH	28-06-06	28	1800	5.00%	1710
N18	VIRAT	19-09-05	79	3000	5.00%	2850
O18	BREAD	12-09-06	58	2900	5.00%	2755
P18	VIRAT	16-08-05	74	2700	5.00%	2565
Q18	BUTTER	31-05-02	81	2400	5.00%	2280
R18	VIRAT	31-05-02	91	4400	5.00%	4180
S18	BUTTER	15-07-01	39	4200	5.00%	3990
T18	BAT	15-07-01	99	3300	5.00%	3135

Item Name	BREAD
-----------	-------

Item code	Item Name	Sol. Date	Qua.	Rate	Discount	Net Price
F18	BREAD	15-07-01	45	2500	5.00%	2375
H18	BREAD	28-06-01	95	4200	5.00%	3990
L18	BREAD	28-06-05	60	2700	5.00%	2565
O18	BREAD	12-09-06	58	2900	5.00%	2755

	maximum	minimum	Average
Rate	6000	1800	3420
Net Price	5700	1710	3249

* calculate total item and total price

$$\text{Total item} = \text{sum}(B4:D4)$$

$$\text{Total price} = \text{Price per unit} * \text{Total item}$$

* calculate total item sold in particular region

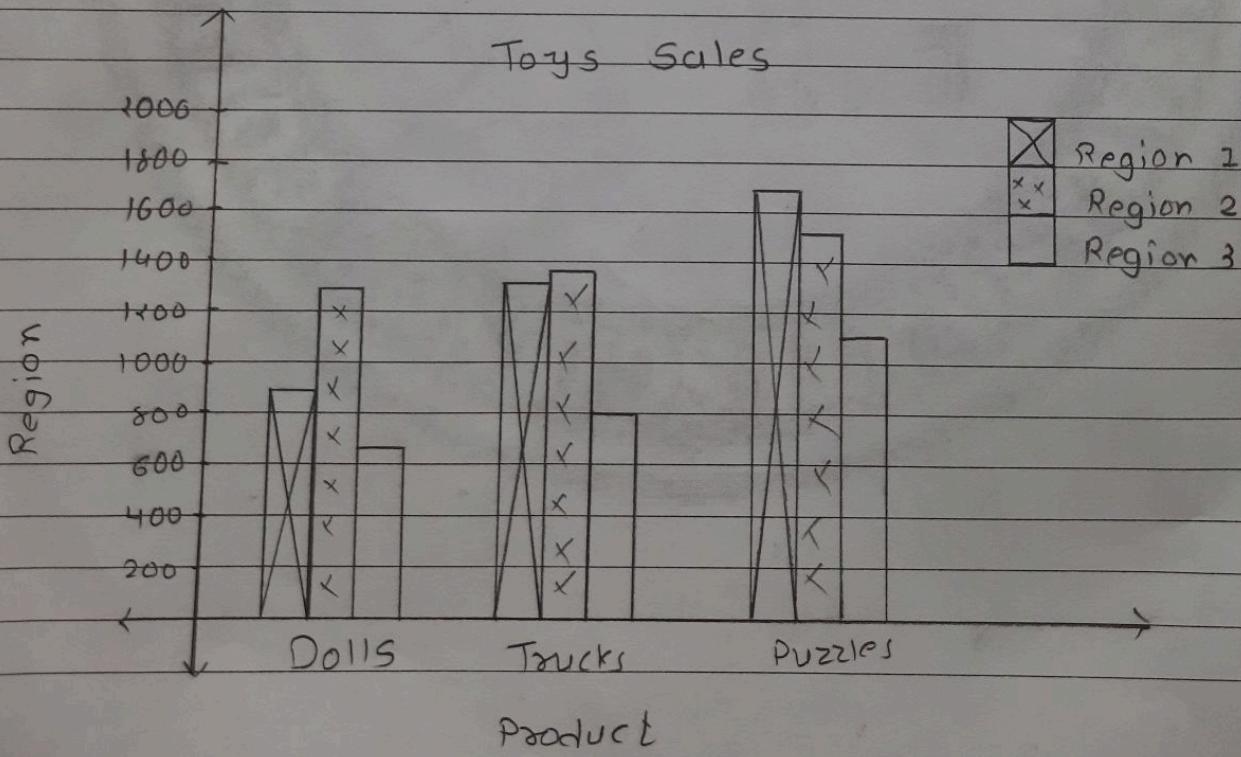
$$\rightarrow \text{Region 1} \rightarrow \text{sum (addition of Region 1's product)}$$

$$\text{Region 2} \rightarrow \text{sum (addition of Region 2's product)}$$

$$\text{Region 3} \rightarrow \text{sum (addition of Region 3's product)}$$

* find out which item sold maximum in which Region

$$\rightarrow \text{IF}(B3 = \max(B3:D3); "REGION"; \text{IF}(C3 = \max(C3:D3); "Region 2"; "Region 3"))$$



17

Products	Region 1	Region 2	Region 3	Price/unit	Total Items	Total Price
Dolls	900	1275	650	25.50	2825	₹ 72,037.50
Trucks	1325	1350	800	55.25	3495	₹ 193,098.75
Puzzles	1650	1525	1100	60.50	4275	₹ 258,637.50

Region	Total
Region 1	3875
Region 2	4170
Region 3	2550

← Total item sold
in a particular
region

Products	Maximum Sold
Dolls	Region 2
Trucks	Region 2
Puzzles	Region 1

← which item sold
maximum in
which region