

### **SOL LAB QUESTIONS:-**

#### **Set 2 & Set 28:-**

*Create table Customer\_Info*

Column_Name	Data_Type	Size	Attributes
Customer_id	Varchar	10	Primary Key/First letter must start with 'C'
Name	Varchar	10	Not Null
City	Varchar	10	
Pincode	Number	8	
State	Varchar	15	
Balance	Number	10,2	

*Data to be inserted:-*

Customer_id	Name	City	Pincode	State	Balance
C001	Shamakant Navathe	Mumbai	400050	Maharashtra	100000.00
C002	Namita Murty	Bangalore	560001	Karnataka	35000.00
C003	Kartik Mahadevan	Mumbai	400030	Maharashtra	90000.00
C004	Monisha mehta	Manglore	560050	Karnataka	45000.00
C005	Amit Desai	Chennai	780001	Tamil Nadu	85000.00

*Create table Sales\_order*

Column_Name	Data_Type	Size	Attributes
orderno	Varchar	10	Primary Key/First letter must start with 'O'
Customer_id	Varchar	10	Foreign Key references Customer_id of Customer_info
orderdate	Date		Not Null
delyaddress	Varchar	15	
Salesman_id	Varchar		
delytype	Char	1	Type part(p)/full(f)
billyn	Char	1	Not Null, Cannot be 0
delydate	Date		Cannot be less than order date
Orderstatus	Varchar	10	Values('IP','F','BO','C')

**Data for Sales\_order**

orderno	Customer_id	orderdate	Salesman_id	delytype	billyn	delydate	Orderstatus
O101	C001	12-june-2018	S001	F	N	20-june-108	IP
O109	C005	25-June-2018	S002	P	N	29-June-2018	C
O102	C003	18-Aug-2018	S001	F	Y	25Aug-2018	F

O107	C001	25-Sept-2018	S005	F	Y	30-Sept-2018	F
O188	C005	19-Sept-2018	S001	P	N	22-Sept-2018	F

Q1. Retrieve the list of names, city, and State of all the Customers.

Q2. Change the name of Customer\_info to Customer\_Details.

Q3. Find the count of all the customers

Q4. Find the Customer name,city and pincode who as placed order no 'O109'-use nested queries

### Set 1 & Set 27:-

#### *Create table Product\_master*

Column_Name	Data_Type	Size	Attributes
Product_No	Varchar	10	Primary Key/First letter must start with 'P'
Description	Varchar	10	Not Null
Profitpercentage	Number	10	Not Null
Unitsmeasure	Varchar	10	Not Null
Qtyonhand	Number	5	Not Null
Recordval	Number	5	Not Null
Sellprice	Number	5,2	Not Null, Cannot be 0
Costprice	Number	5,2	Not Null, Cannot be 0

#### *Insert the records as :*

Product_No	Description	Profitpercentage	Unitsmeasure	Qtyonhand	Recordval	Sellprice	Costprice
P001	T-Shirts	5	Piece	200	50	350	250
P340	Shirts	7	Piece	150	50	500	350
P671	Jeans	5	Piece	100	20	600	450
P885	Trousers	5	Piece	100	20	750	500
P005	Denim Shirts	2	Piece	150	50	850	550

#### *Create table Sales\_order*

Column_Name	Data_Type	Size	Attributes
orderno	Varchar	10	Primary Key/First letter must start with 'O'

Customer_id	Varchar	10	
orderdate	Date		Not Null
Salesman_id	Varchar		
delytype	Char	1	Typepart(p)/full(f)
billyn	Char	1	Not Null, Cannot be 0
delydate	Date		Cannot be less than order date
Orderstatus	Varchar	10	Values('IP','F','BO','C')

#### Data for Sales\_order

orderno	Customer_id	orderdate	Salesman_id	delytype	billyn	delydate	Orderstatus
O101	C001	12-june-2018	S001	F	N	20-june-108	IP
O109	C005	25-June-2018	S002	P	N	29-June-2018	C
O102	C003	18-Aug-2018	S001	F	Y	25Aug-2018	F
O107	C001	25-Sept-2018	S005	F	Y	30-Sept-2018	F
O188	C005	19-Sept-2018	S001	P	N	22-Sept-2018	F

#### Create table Sales\_order\_details

Column_Name	Data_Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / Foreign Key references s_order_no of sales_order table.
Product_no	Varchar	6	Primary Key / Foreign Key references product_no of product_master table.
Qty_ordered	Decimal	8	
Qty_disp	Decimal	8	
Product_rate	Decimal	10,2	

Data for sales\_order\_details table:

S_order_no	Product_no	Qty_ordered	Qty_disp	Product_rate
O19001	P00001	4	4	525
O19001	P07965	2	1	8400
O19001	P07885	2	1	5250
O19002	P00001	10	0	525
O46865	P07868	3	3	3150
O46865	P07885	3	1	5250
O46865	P00001	10	10	525
O46865	P03453	4	4	1050
O19003	P03453	2	2	1050
O19003	P06734	1	1	12000
O46866	P07965	1	0	8400
O46866	P07975	1	0	1050
O10008	P00001	10	5	525
O10008	P07975	5	3	1050

Q1. List all the products whose description is Shirts

Q2. Add a column 'Contact\_No' of data type 'number' and size '10' to sales\_order table

Q3. Find the minimum and maximum sell price of products.

Q4. Find the product\_no and description of moving products -use joins.

#### **Set 05 & Set 31:-**

Create table employee ( eid, ename, address, city, pincode, salary)

Constraints: First letter of eid must start with 'E', ename should Not Null.

Insert suitable values.

Create function that set the credit level to either 'Platinum, Silver, Gold' based on salary earned.

#### **Set 06 & Set 32:-**

Create table customer ( cid, cname, address, city, pincode, department\_no)

Constraints: First letter of cid must start with 'C', cname should Not Null.

Insert suitable values.

Implement Cursors who can fetch cid, cname columns from a table and display it up.

#### **Set 03 & Set 29:-**

Create table sales\_order\_details ( s\_order\_no, product\_no, qty\_ordered, qty\_disp, product\_rate)

Constraints: First letter of s\_order\_no must start with 'O', First letter of product\_no must start with 'P',

Insert suitable values.

Create function that set the rate level to either 'Cheap, Moderate, Expensive' based on product\_rate.

#### **Set 04 & Set 30 :-**

Create a trigger to populate an audit table to store changes to existing records when any records are updated on to the table.

**Set 08 & Set 34:-*****Create table Customer\_Info***

Column_Name	Data_Type	Size	Attributes
Customer_id	Varchar	10	Primary Key/First letter must start with 'C'
Name	Varchar	10	Not Null
City	Varchar	10	
Pincode	Number	8	
State	Varchar	15	
Balance	Number	10,2	

***Insert the records as :***

Customer_id	Name	City	Pincode	State	Balance
C001	Shamakant Navathe	Mumbai	400050	Maharashtra	100000.00
C002	Namita Murty	Bangalore	560001	Karnataka	35000.00
C003	Kartik Mahadevan	Mumbai	400030	Maharashtra	90000.00
C004	Monisha mehta	Manglore	560050	Karnataka	45000.00
C005	Amit Desai	Chennai	780001	Tamil Nadu	85000.00

***Create table Sales\_order***

Column_Name	Data_Type	Size	Attributes
orderno	Varchar	10	Primary Key/First letter must start with 'O'
Customer_id	Varchar	10	Foreign Key references Customer_id of Customer_info
orderdate	Date		Not Null
delyaddress	Varchar	15	
Salesman_id	Varchar		
delytype	Char	1	Type part(p)/full(f)
billyn	Char	1	Not Null, Cannot be 0
delydate	Date		Cannot be less than order date
Orderstatus	Varchar	10	Values('IP', 'F', 'BO', 'C')

**Data for Sales\_order**

orderno	Customer_id	orderdate	Salesman_id	delytype	billyn	delydate	Orderstat us
O101	C001	12-june-2018	S001	F	N	20-june-108	IP
O109	C005	25-June-2018	S002	P	N	29-June- 2018	C
O102	C003	18-Aug-2018	S001	F	Y	25Aug-2018	F
O107	C001	25-Sept-2018	S005	F	Y	30-Sept-2018	F
O188	C005	19-Sept-2018	S001	P	N	22-Sept-2018	F

Q1. List all the customers who stay in 'Mumbai' and 'Chennai'

Q2. List the customers whose names contain with letters 'am'

Q3. Change the Balance of Customer\_id 'C002' to 89000.00

Q4. . Find the minimum balance of customers.

Q5. Create a view on a table in such a way that view contains orderno, Customer\_id and orderdate.

**Set 07 & Set 33 :-*****Create table Customer***

Column_Name	Data_Type	Size	Attributes
Customer_id	Varchar	10	Primary Key/First letter must start with 'C'
Name	Varchar	10	Not Null
City	Varchar	10	
Pincode	Number	8	
State	Varchar	15	
Balance	Number	10,2	

***Insert the records as :***

Customer_id	Name	City	Pincode	State	Balance
C001	Shamakant Navathe	Mumbai	400050	Maharashtra	100000.00
C002	Namita Murty	Bangalore	560001	Karnataka	35000.00
C003	Kartik Mahadevan	Mumbai	400030	Maharashtra	90000.00
C004	Monisha mehta	Manglore	560050	Karnataka	45000.00
C005	Amit Desai	Chennai	780001	Tamil Nadu	85000.00

Implement suitable procedures, using in & out parameters

**Set 10 & Set 36:-*****Create table Salesman\_detail***

Column_Name	Data_Type	Size	Attributes
Salesman_id	Varchar	10	Primary Key/First letter must start with 'S'
Name	Varchar	10	Not Null
Address	Varchar	10	
city	Varchar	8	
Pincode	Number	15	
State	Varchar	10	
Saleamt	Number	8,2	Not Null, Cannot be 0
Tgttoget	Number	6,2	Not Null, Cannot be 0
Ytdsales	Number	6,2	Not Null
Remarks	varchar	50	

**Data for Salesman\_details**

Salesman_id	Name	Address	City	Pincode	State	Saleamt	Tgttoget	Ytdsales	Remarks
S001	Aditya	Bandra	Mumbai	400050	Maharashtra	3000	100	50	good
S002	Rohan	Khar	Mumbai	400051	Maharashtra	3000	200	100	good
S003	Anish	Borivali	Mumbai	400054	Maharashtra	3000	200	100	good
S004	Abhay	Sanpada	Mumbai	400045	Maharashtra	3500	200	100	good
S005	Roshan	Bandra	Mumbai	400050	Maharashtra	3000	200	150	good

Q1. Implement trigger on Salesman\_detail table to change name attribute to upper case

Q2. Copy the table Salesman\_detail as sd

Q3. Alter the table by adding a column salary

Q4. Describe the table Salesman\_detail

**Set 12 & Set 38 :-**

**Table – Worker**

<b><u>WORKER_ID</u></b>	<b><u>FIRST_NAME</u></b>	<b><u>LAST_NAME</u></b>	<b><u>SALARY</u></b>	<b><u>JOINING_DATE</u></b>	<b><u>DEPARTMENT</u></b>
1	Monika	Arora	100000	2014-02-20	HR
2	Niharika	Verma	80000	2014-06-11	Admin
3	Vishal	Singhal	300000	2014-02-20	HR
4	Amitabh	Singh	500000	2014-02-20	Admin
5	Vivek	Bhati	500000	2014-06-11	Admin
6	Vipul	Diwan	200000	2014-06-11	Account
7	Satish	Kumar	75000	2014-01-20	Account
8	Geetika	Chauhan	90000	2014-04-11	Admin

**Table – Bonus**

<b><u>WORKER_ID</u></b> <b>(foreign key)</b>	<b><u>BONUS_DATE</u></b>	<b><u>BONUS_AMOUNT</u></b>
1	2016-02-20	5000
2	2016-06-11	3000
3	2016-02-20	4000
1	2016-02-20	4500
2	2016-06-11	3500

**Table – Title**

<b><u>WORKER_ID</u></b> <b>(foreign key)</b>	<b><u>WORKER_TITLE</u></b>	<b><u>AFFECTED_FROM</u></b>
1	Manager	2016-02-20
2	Executive	2016-06-11
8	Executive	2016-06-11
5	Manager	2016-06-11



4	Asst. Manager	2016-06-11
7	Executive	2016-06-11
6	Lead	2016-06-11
3	Lead	2016-06-11

Q1. Write an SQL query to fetch “FIRST\_NAME” from Worker table

Q2. Write an SQL query to print all Worker details from the Worker table order by FIRST\_NAME Ascending.

Q3. Write an SQL query to print details for Workers with the first name as “Vipul” and “Satish” from Worker table.

Q4. Write an SQL query to print details of Workers with DEPARTMENT name as “Admin”.

Q5 Write an SQL query to fetch the no. of workers for each department in the descending order.

### **Set 13 & Set 39:-**

**Table – Worker**

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20	HR
2	Niharika	Verma	80000	2014-06-11	Admin
3	Vishal	Singhal	300000	2014-02-20	HR
4	Amitabh	Singh	500000	2014-02-20	Admin
5	Vivek	Bhati	500000	2014-06-11	Admin
6	Vipul	Diwan	200000	2014-06-11	Account
7	Satish	Kumar	75000	2014-01-20	Account
8	Geetika	Chauhan	90000	2014-04-11	Admin

**Table – Bonus**

WORKER_ID (foreign key)	BONUS_DATE	BONUS_AMOUNT
1	2016-02-20	5000

2	2016-06-11	3000
3	2016-02-20	4000
1	2016-02-20	4500
2	2016-06-11	3500

**Table – Title**

WORKER_ID (foreign key)	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20
2	Executive	2016-06-11
8	Executive	2016-06-11
5	Manager	2016-06-11
4	Asst. Manager	2016-06-11
7	Executive	2016-06-11
6	Lead	2016-06-11
3	Lead	2016-06-11

Q1. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with 'h' and contains six alphabets.

Q2 Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000.

Q3. Write an SQL query to fetch the count of employees working in the department 'Account'.

Q4. Write an SQL query to print details of the Workers who are also Managers.

Q5. Describe Bonus Table

### **Set 09 & Set 35:-**

- Employee(empno,ename,deptno,job,hiredate)
- Department(deptno,dname,loc)

Include the following constraints on column of employee table.

a) to make the empno as primary key of the table and

b) to ensure that the ename column does not contain NULL values and

Include the following constraints on column of department table.

- a) to make deptno as primary key.
- b) to ensure dname,loc columns does not contain NULL values

Also enforce REFERENTIAL INTEGRITY, declare deptno field of dept table as primary key and deptno field of employee table as foreign key.

Insert following values in employee table.

EMPNO	ENAME	JOB	HIREDATE	DEPTNO
7369	SMITH	CLERK	17-DEC-80	20
7499	ALLEN	SALESMAN	20-FEB-81	30
7521	WARD	SALESMAN	22-FEB-81	30
7566	JONES	MANAGER	02-APR-81	20
7654	MARTIN	SALESMAN	28-SEP-81	30

Insert following values in Department table.

DEPTNO	Dname	Loc
10	Accounts	Canada
20	Admin	Houston
30	Accounts	California

Solve the following Queries:

- Retrieve all rows of employee table.
- Find all manager not in dept no 10 ?
- To find the total number of employees.
- To find the total number of clerk hired after 13-jan-81.
- Create a view on a table in such a way that view contains empno, ename and deptno.

### Set 11 & Set 37:-

Consider Employee table

EMPNO	EMP_NAME	DEPT	SALARY	DOJ	BRANCH
E101	Amit	Production	45000	12-Mar-00	Bangalore
E102	Amit	HR	70000	03-Jul-02	Bangalore
E103	sunita	managemer	120000	11-Jan-01	mysore
E105	sunita	IT	67000	01-Aug-01	mysore
E106	mahesh	Civil	145000	20-Sep-03	Mumbai

Perform the following

1. Display all the fields of employee table
2. Retrieve employee number and their salary
3. Retrieve average salary of all employee
4. Retrieve number of employee
5. Retrieve number of department
6. Retrieve total salary of employee group by employee name and count similar names
7. Retrieve total salary of employee which is greater than >120000
8. Display name of employee in descending order
9. Display details of employee whose name is AMIT and salary greater than 50000;

## **Set 15 & Set 41:-**

**Table Name :** Challan\_Header

**Description :** Use to store information about challans made for the order.

Column Name	Data Type	Size	Attributes
Challan_no	Varchar	6	Primary Key / first two letters must start with 'CH'.
S_order_no	Varchar	6	
Challan_date	Date		Not Null
Billed_yn	Char	1	Values('Y','N'), Default 'N'.

**Table Name :** Challan\_Details

**Description :** Use to store information about challans made for the order.

Column Name	Data Type	Size	Attributes
Challan_no	Varchar	6	Primary key/ Foreign key references challan_no of challan_header table.
Product_no	Varchar	6	Primary key
Qty_disp	Decimal	4,2	Not Null

**Data for challan\_headertable :**

Challan_no	S_order_no	Challan_date	Billed
CH9001	O19001	12-dec-95	Y
CH6865	O46865	12-nov-95	Y
CH3965	O10008	12-oct-95	Y

**Data for challan\_details table :**

Challan_no	Product_no	Qty_disp
CH9001	P00001	4
CH9001	P07965	1
CH9001	P07885	1
CH6865	P07868	3
CH6865	P03453	4
CH6865	P00001	10
CH3965	P00001	5
CH3965	P07975	2

Solve the following Queries:

- Retrieve all rows of challan\_details table.
- Add column 'qty\_pending' in challan\_details
- Find all challan\_no for P00001?
- To find the total qty\_disp.
- Create a view on a table in such a way that view contains challan\_no, s\_order\_no & product\_no

## **Set 14 & Set 40:-**

**Table Name :** sales\_order\_details

**Description :** Use to store information about products ordered.

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key
Product_no	Varchar	6	Primary Key
Qty_ordered	Decimal	8	
Qty_disp	Decimal	8	
Product_rate	Decimal	10,2	

Data for sales\_order\_details table :

S_order_no	Product_no	Qty_ordered	Qty_disp	Product_rate
O19001	P00001	4	4	525
O19001	P07965	2	1	8400
O19001	P07885	2	1	5250
O19002	P00001	10	0	525
O46865	P07868	3	3	3150
O46865	P07885	3	1	5250
O46865	P00001	10	10	525
O46865	P03453	4	4	1050
O19003	P03453	2	2	1050
O19003	P06734	1	1	12000
O46866	P07965	1	0	8400
O46866	P07975	1	0	1050
O10008	P00001	10	5	525
O10008	P07975	5	3	1050

**Table Name :** sales\_order

**Description :** Use to store information about order

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / First letter must start with 'O'
S_order_date	Date		
Client_no	Varchar	6	
Dely_addr	Varchar	25	
Salesman_no	Varchar	6	
Dely_type	Char	1	Delivery : part (P) / full (F), Default 'F'
Billed_yn	Char	1	
Dely_date	Date		Cannot be less than s_order_date
Order_status	Varchar	10	Values('In Process', 'Fulfilled', 'BackOrder','Canceled')

Data for sales\_order table :

S_order_no	S_order_date	Client_no	Dely Type	Bill YN	Salesman No	Dely_date	Order Status
O19001	12-jan-96	C00001	F	N	S00001	20-jan-96	IP
O19002	25-jan-96	C00002	P	N	S00002	27-jan-96	C
O46865	18-feb-96	C00003	F	Y	S00003	20-feb-96	F
O19003	03-apr-96	C00001	F	Y	S00001	07-apr-96	F
O46866	20-may-96	C00004	P	N	S00002	22-may-96	C
O10008	24-may-96	C00005	F	N	S00004	26-may-96	IP

### Create following procedures:-

1. Procedures which displays only 3 rows of table sales\_order\_details
2. Procedure which displays the number of order placed from sales\_order

### Set 17 & Set 43 & Set 55:-

Create sales\_order(s\_order\_no, product\_no,qty\_ordered,qty\_disp,product\_rate)

Constraints: First letter of s\_order\_no must start with 'O', First letter of product\_no must start with 'P',

Insert suitable values (minimum 7 tuples)

Implement Cursors who can fetch s\_order\_no,product\_rate columns from a table and display it up

### Set 16 & Set 42:-

Create a trigger to populate an audit table to store changes to existing records when any records are updated on to the table.

### Set 19 & Set 45:-

Create table Student (student\_id, first\_name, minit, last\_name, DOB, Address, pointer\_scored, class)

Constraints: First letter of student\_id must start with 'S', First letter of class must start with 'IT',

Insert suitable values (min 7 tuples)

Create function that set the grade either 'Distinction, First Class, Second Class, Pass Class' based on pointer\_scored.

### Set 18 & Set 44 & Set 54:-

Create table Employee(employee\_id, name, designation, branch, date\_of\_joining, date\_of\_superannuation)

Constraints:

First letter of Employee\_id must start with 'E'.

designation should not be null

date\_of\_superannuation should be greater than date\_of\_joining

Insert suitable values (min 7 tuples)

- Alter the table by adding column salary
- Describe the table employee
- Copy the table employee as emp
- Implement trigger on employee table to change name attributes to upper case.

### Set 21 & Set 47 & Set 53:-

Client\_master

**Description :** Use to store information about clients.

Column Name	Data Type	Size	Attributes
Client_no	Varchar	6	Primary Key / First letter must start with 'C'.
Name	Varchar	20	Not Null
City	Varchar	15	
State	Varchar	15	
Pincode	Decimal	6	
Bal_due	Decimal	10,2	

**Table Name :** product\_master

**Description :** Use to store information about products.

Column Name	Data Type	Size	Attributes
Product_no	Varchar	6	Primary Key / first letter must start with 'P'
Description	Varchar	15	Not Null
Profit_percent	Decimal	2,2	Not Null
Unit_measure	Varchar	10	Not Null
Qty_on_hand	Decimal	8	Not Null
Reorder_lvl	Decimal	8	Not Null
Sell_price	Decimal	8,2	Not Null, Cannot be 0.
Cost_price	Decimal	8,2	Not Null, Cannot be 0.

**Table Name :** sales\_order

**Description :** Use to store information about order

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / First letter must start with 'O'
S_order_date	Date		
Client_no	Varchar	6	Foreign Key references client_no of client_master table
Dely_addr	Varchar	25	
Salesman_no	Varchar	6	
Dely_type	Char	1	Delivery : part (P) / full (F), Default 'F'
Billed_yn	Char	1	
Dely_date	Date		Cannot be less than s_order_date
Order_status	Varchar	10	Values('In Process', 'Fulfilled', 'BackOrder','Canceled')

**Data for client\_master table :**

Client_no	Name	City	Pincode	State	Bal_due
C00001	Ivan Bayross	Bombay	400054	Maharashtra	15000
C00002	Vandana Saitwal	Madras	780001	Tamil Nadu	0
C00003	Pramada Jaguste	Bombay	400057	Maharashtra	5000
C00004	Basu Navindgi	Bombay	400056	Maharashtra	0
C00005	Ravi Sreedharan	Delhi	100001		2000
C00006	Rukmini	Bombay	400050	Maharashtra	0

**Data for Product\_master table :**

Product_no	Description	Profit Percent	UOM	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
P00001	1.44 Floppies	5	Piece	100	20	525	500
P03453	Monitors	6	Piece	10	3	12000	11280
P06734	Mouse	5	Piece	20	5	1050	1000
P07865	1.22 Floppies	5	Piece	100	20	525	500
P07868	Keyboards	2	Piece	10	3	3150	3050
P07885	CD Drive	2.5	Piece	10	3	5250	5100
P07965	540 HDD	4	Piece	10	3	8400	8000
P07975	1.44 Drive	5	Piece	10	3	1050	1000
P08865	1.22 Drive	5	Piece	2	3	1050	1000

**Data for sales\_order table :**

S_order_no	S_order_date	Client_no	Dely Type	Bill YN	Salesman No	Dely_date	Order Status
O19001	12-jan-96	C00001	F	N	S00001	20-jan-96	IP
O19002	25-jan-96	C00002	P	N	S00002	27-jan-96	C
O46865	18-feb-96	C00003	F	Y	S00003	20-feb-96	F
O19003	03-apr-96	C00001	F	Y	S00001	07-apr-96	F
O46866	20-may-96	C00004	P	N	S00002	22-may-96	C
O10008	24-may-96	C00005	F	N	S00004	26-may-96	IP

- List the various products available from the product\_master.
- Find the list of all clients who stay in bombay or city delhi or city madras.
- Print the information from sales\_order table of order placed in month of january.
- Calculate the square root of price of each product
- Divide the cost of product '540 HDD' by difference between its price and 100.

### Set 20 & Set 46:-

Create table Employee(employee\_id, name, designation, date\_of\_joining, date\_of\_superannuation, email\_id)

Constraints:

First letter of Employee\_id must start with 'E'.

designation should not be null

date\_of\_superannuation should be greater than date\_of\_joining

Implement Cursors who concatenates email\_id columns from above table and display it up

### Set 23 & Set 49:-

Client\_master

**Description :** Use to store information about clients.

Column Name	Data Type	Size	Attributes
Client_no	Varchar	6	Primary Key / First letter must start with 'C'.
Name	Varchar	20	Not Null
City	Varchar	15	
State	Varchar	15	
Pincode	Decimal	6	
Bal_due	Decimal	10,2	

Data for client\_master table :

Client_no	Name	City	Pincode	State	Bal_due
C00001	Ivan Bayross	Bombay	400054	Maharashtra	15000
C00002	Vandana Saitwal	Madras	780001	Tamil Nadu	0
C00003	Pramada Jaguste	Bombay	400057	Maharashtra	5000
C00004	Basu Navindgi	Bombay	400056	Maharashtra	0
C00005	Ravi Sreedharan	Delhi	100001		2000
C00006	Rukmini	Bombay	400050	Maharashtra	0

Table Name : sales\_order

**Description :** Use to store information about order

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / First letter must start with 'O'
S_order_date	Date		
Client_no	Varchar	6	Foreign Key references client_no of client_master table
Dely_addr	Varchar	25	
Salesman_no	Varchar	6	
Dely_type	Char	1	Delivery : part (P) / full (F), Default 'F'
Billed_yn	Char	1	
Dely_date	Date		Cannot be less than s_order_date
Order_status	Varchar	10	Values('In Process', 'Fulfilled', 'BackOrder','Canceled')

Data for sales\_order table :

S_order_no	S_order_date	Client_no	Dely Type	Bill YN	Salesman No	Dely_date	Order Status
O19001	12-jan-96	C00001	F	N	S00001	20-jan-96	IP
O19002	25-jan-96	C00002	P	N	S00002	27-jan-96	C
O46865	18-feb-96	C00003	F	Y	S00003	20-feb-96	F
O19003	03-apr-96	C00001	F	Y	S00001	07-apr-96	F
O46866	20-may-96	C00004	P	N	S00002	22-may-96	C
O10008	24-may-96	C00005	F	N	S00004	26-may-96	IP



**Table Name :** sales\_order\_details

**Description :** Use to store information about products ordered.

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / Foreign Key references s_order_no of sales_order table.
Product_no	Varchar	6	
Qty_ordered	Decimal	8	
Qty_disp	Decimal	8	
Product_rate	Decimal	10,2	

**Data for sales\_order\_details table :**

S_order_no	Product_no	Qty_ordered	Qty_disp	Product_rate
O19001	P00001	4	4	525
O19001	P07965	2	1	8400
O19001	P07885	2	1	5250
O19002	P00001	10	0	525
O46865	P07868	3	3	3150
O46865	P07885	3	1	5250
O46865	P00001	10	10	525
O46865	P03453	4	4	1050
O19003	P03453	2	2	1050
O19003	P06734	1	1	12000
O46866	P07965	1	0	8400
O46866	P07975	1	0	1050
O10008	P00001	10	5	525
O10008	P07975	5	3	1050

- Find out the clients who stay in city whose second letter is 'a' .
- Print the list of clients whose bal\_due are greater than value 10000.
- Determine the maximum and minimum qty\_ordered. Rename the title as max\_qty and min\_qty respectively
- List the names,city,state of clients not in the state of 'Maharashtra' .
- Create suitable view using above tables

## Set 22 & Set 48:-

Client\_master

**Description :** Use to store information about clients.

Column Name	Data Type	Size	Attributes
Client_no	Varchar	6	Primary Key / First letter must start with 'C'.
Name	Varchar	20	Not Null
City	Varchar	15	
State	Varchar	15	
Pincode	Decimal	6	
Bal_due	Decimal	10,2	

**Data for client\_master table :**

Client_no	Name	City	Pincode	State	Bal_due
C00001	Ivan Bayross	Bombay	400054	Maharashtra	15000
C00002	Vandana Saitwal	Madras	780001	Tamil Nadu	0
C00003	Pramada Jaguste	Bombay	400057	Maharashtra	5000
C00004	Basu Navindgi	Bombay	400056	Maharashtra	0
C00005	Ravi Sreedharan	Delhi	100001		2000
C00006	Rukmini	Bombay	400050	Maharashtra	0

**Table Name :** product\_master

**Description :** Use to store information about products.

Column Name	Data Type	Size	Attributes
Product_no	Varchar	6	Primary Key / first letter must start with 'P'
Description	Varchar	15	Not Null
Profit_percent	Decimal	4,2	Not Null
Unit_measure	Varchar	10	Not Null
Qty_on_hand	Decimal	8	Not Null
Reorder_lvl	Decimal	8	Not Null
Sell_price	Decimal	8,2	Not Null, Cannot be 0.
Cost_price	Decimal	8,2	Not Null, Cannot be 0.

**Data for Product\_master table :**

Product_no	Description	Profit Percent	UOM	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
P00001	1.44 Floppies	5	Piece	100	20	525	500
P03453	Monitors	6	Piece	10	3	12000	11280
P06734	Mouse	5	Piece	20	5	1050	1000
P07865	1.22 Floppies	5	Piece	100	20	525	500
P07868	Keyboards	2	Piece	10	3	3150	3050
P07885	CD Drive	2.5	Piece	10	3	5250	5100
P07965	540 HDD	4	Piece	10	3	8400	8000
P07975	1.44 Drive	5	Piece	10	3	1050	1000
P08865	1.22 Drive	5	Piece	2	3	1050	1000

**Table Name :** sales\_order

**Description :** Use to store information about order

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / First letter must start with 'O'
S_order_date	Date		
Client_no	Varchar	6	Foreign Key references client_no of client_master table
Dely_addr	Varchar	25	
Salesman_no	Varchar	6	
Dely_type	Char	1	Delivery : part (P) / full (F), Default 'F'
Billed_yn	Char	1	
Dely_date	Date		Cannot be less than s_order_date
Order_status	Varchar	10	Values('In Process', 'Fulfilled', 'BackOrder','Canceled')

**Data for sales\_order table :**

S_order_no	S_order_date	Client_no	Dely Type	Bill YN	Salesman No	Dely_date	Order Status
O19001	12-jan-96	C00001	F	N	S00001	20-jan-96	IP
O19002	25-jan-96	C00002	P	N	S00002	27-jan-96	C
O46865	18-feb-96	C00003	F	Y	S00003	20-feb-96	F
O19003	03-apr-96	C00001	F	Y	S00001	07-apr-96	F
O46866	20-may-96	C00004	P	N	S00002	22-may-96	C
O10008	24-may-96	C00005	F	N	S00004	26-may-96	IP

**Table Name :** sales\_order\_details

**Description :** Use to store information about products ordered.

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / Foreign Key references s_order_no of sales_order table.
Product_no	Varchar	6	Primary Key / Foreign Key references product_no of product_master table.
Qty_ordered	Decimal	8	
Qty_disp	Decimal	8	
Product_rate	Decimal	10,2	

Data for sales\_order\_details table :

S_order_no	Product_no	Qty_ordered	Qty_disp	Product_rate
O19001	P00001	4	4	525
O19001	P07965	2	1	8400
O19001	P07885	2	1	5250
O19002	P00001	10	0	525
O46865	P07868	3	3	3150
O46865	P07885	3	1	5250
O46865	P00001	10	10	525
O46865	P03453	4	4	1050
O19003	P03453	2	2	1050
O19003	P06734	1	1	12000
O46866	P07965	1	0	8400
O46866	P07975	1	0	1050
O10008	P00001	10	5	525
O10008	P07975	5	3	1050

- Find out the clients who stay in city whose second letter is 'e'
- Find all products whose qty\_on\_hand is less than reorder level
- Print the description and total qty sold for each product
- Find the products and their quantities for the orders placed by 'Vandana Saitwal' and 'Ivan Bayross'

## Set 24 & Set 50:-

Client\_master

**Description :** Use to store information about clients.

Column Name	Data Type	Size	Attributes
Client_no	Varchar	6	Primary Key / First letter must start with 'C'.
Name	Varchar	20	Not Null
City	Varchar	15	
State	Varchar	15	
Pincode	Decimal	6	
Bal_due	Decimal	10,2	

Data for client\_master table :

Client_no	Name	City	Pincode	State	Bal_due
C00001	Ivan Bayross	Bombay	400054	Maharashtra	15000
C00002	Vandana Saitwal	Madras	780001	Tamil Nadu	0
C00003	Pramada Jaguste	Bombay	400057	Maharashtra	5000
C00004	Basu Navindgi	Bombay	400056	Maharashtra	0
C00005	Ravi Sreedharan	Delhi	100001		2000
C00006	Rukmini	Bombay	400050	Maharashtra	0

**Table Name :** product\_master

**Description :** Use to store information about products.

Column Name	Data Type	Size	Attributes
Product_no	Varchar	6	Primary Key / first letter must start with 'P'
Description	Varchar	15	Not Null
Profit_percent	Decimal	4,2	Not Null
Unit_measure	Varchar	10	Not Null
Qty_on_hand	Decimal	8	Not Null
Reorder_lvl	Decimal	8	Not Null
Sell_price	Decimal	8,2	Not Null, Cannot be 0.
Cost_price	Decimal	8,2	Not Null, Cannot be 0.

Data for Product\_master table :

Product_no	Description	Profit Percent	UOM	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
P00001	1.44 Floppies	5	Piece	100	20	525	500
P03453	Monitors	6	Piece	10	3	12000	11280
P06734	Mouse	5	Piece	20	5	1050	1000
P07865	1.22 Floppies	5	Piece	100	20	525	500
P07868	Keyboards	2	Piece	10	3	3150	3050
P07885	CD Drive	2.5	Piece	10	3	5250	5100
P07965	540 HDD	4	Piece	10	3	8400	8000
P07975	1.44 Drive	5	Piece	10	3	1050	1000
P08865	1.22 Drive	5	Piece	2	3	1050	1000

Create function that set the rate level to either 'Cheap, Moderate, Expensive' based on sell\_price

## Set 26 & Set 52:-

**Table Name :** sales\_order

**Description :** Use to store information about order

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / First letter must start with 'O'
S_order_date	Date		
Client_no	Varchar	6	
Dely_addr	Varchar	25	
Salesman_no	Varchar	6	
Dely_type	Char	1	Delivery : part (P) / full (F), Default 'F'
Billed_yn	Char	1	
Dely_date	Date		Cannot be less than s_order_date
Order_status	Varchar	10	Values('In Process', 'Fulfilled', 'BackOrder','Canceled')

**Data for sales\_order table :**

S_order_no	S_order_date	Client_no	Dely Type	Bill YN	Salesman No	Dely_date	Order Status
O19001	12-jan-96	C00001	F	N	S00001	20-jan-96	IP
O19002	25-jan-96	C00002	P	N	S00002	27-jan-96	C
O46865	18-feb-96	C00003	F	Y	S00003	20-feb-96	F
O19003	03-apr-96	C00001	F	Y	S00001	07-apr-96	F
O46866	20-may-96	C00004	P	N	S00002	22-may-96	C
O10008	24-may-96	C00005	F	N	S00004	26-may-96	IP

**Table Name :** sales\_order\_details

**Description :** Use to store information about products ordered.

Column Name	Data Type	Size	Attributes
S_order_no	Varchar	6	Primary Key / Foreign Key references s_order_no of sales_order table.
Product_no	Varchar	6	Primary Key
Qty_ordered	Decimal	8	
Qty_disp	Decimal	8	
Product_rate	Decimal	10,2	

**Data for sales\_order\_details table :**

S_order_no	Product_no	Qty_ordered	Qty_disp	Product_rate
O19001	P00001	4	4	525
O19001	P07965	2	1	8400
O19001	P07885	2	1	5250
O19002	P00001	10	0	525
O46865	P07868	3	3	3150
O46865	P07885	3	1	5250
O46865	P00001	10	10	525
O46865	P03453	4	4	1050
O19003	P03453	2	2	1050
O19003	P06734	1	1	12000
O46866	P07965	1	0	8400
O46866	P07975	1	0	1050

O10008	P00001	10	5	525
O10008	P07975	5	3	1050

**Implement suitable procedures using in & out parameters**

**Set 25 & Set 51:-**

Create table Employee(employee\_id, name, designation, branch, date\_of\_joining, date\_of\_superannuation,salary)  
 Constraints:  
 First letter of Employee\_id must start with ‘E’.  
 designation should not be null  
 date\_of\_supperannuation should be greater than date\_of\_joining

Create suitable view & implement procedures using out parameters

