## Q1. Create the following tables:

## i) client\_master

columnname	datatype	size
client_no	varchar2	6
name	varchar2	20
address1	varchar2	30
address2	varchar2	30
city	varchar2	15
pincode	number 6	15
bal_due	number 10,2	

## ii) Product\_master

Columnname	datatype	size

Product\_no varchar2 Description varchar2

Profit\_percent number
Unit\_measure varchar2
Qty\_on\_hand number
Reoder\_lvl number

Sell\_price number

Cost\_price number

### Q2- Insert the following data into their respective tables:

Clientno	Name	city	pincode	state	bal.due
0001	Ivan	Bombay	400054	Maharashtra	15000
0002	Vandana	Madras	780001	Tamilnadu	0
0003	Pramada	Bombay	400057	Maharashtra	5000
0004	Basu	Bombay	400056	Maharashtra	0
0005	Ravi	Delhi	100001	Delhi	2000
0006	Rukmini	Bombay	400050	Maharashtra	0

### **Data for Product Master:**

Product No.	Desciption Percent me	Profit asured	% Unit Qty on hand lvl	Re	order Sell price price	Cost	
P00001	1.44floppies	5	piece	100	20	525	500
P03453	Monitors	6	piece	10	3	12000	11200
P06734	Mouse	5	piece	20	5	1050	500
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

# Q3:- On the basis of above two tables answer the following queries:

- i) Find out the names of all the clients.
- ii) Retrieve the list of names and cities of all the clients.
- iii) List the various products available from the product master table.
- iv) List all the clients who are located in Bombay.
- v) Display the information for client no 0001 and 0002.
- vi) Find the products with description as '1.44 drive' and '1.22 Drive'.
- vii) Find all the products whose sell price is greater then 5000.
- viii) Find the list of all clients who stay in in city 'Bombay' or city 'Delhi' or 'Madras'.
- ix) Find the product whose selling price is greater than 2000 and less than or equal to 5000.
- x) List the name, city and state of clients not in the state of 'Maharashtra'.

#### Queries 1.

```
i. create table client_master( client_no varchar(6) primary key, name varchar (20), address1 varchar(30), address2 varchar(30), city varchar (15), state varchar (15), pincode int (6), bal_due decimal (10, 2));
ii. create table Product_master (
```

Product\_no varchar (6),
Description varchar (30),
Profit\_percent decimal (3,2),
Unit\_measure varchar (10),
Oty\_on\_hand int(6),
Reoder\_lvl int(4),
Sell\_price decimal (10,2),
Cost decimal (10,2));

#### Queries 2.

```
i.

INSERT INTO client_master (client_no, name, city, pincode, state, bal_due)
VALUES
('0001', 'Ivan', 'Bombay', '400054', 'Maharashtra', '15000'),
('0002', 'Vandana', 'Madras', '780001', 'Tamilnadu', '0'),
('0003', 'Pramoda', 'Bombay', '400057', 'Maharashtra', '5000'),
('0004', 'Basu', 'Bombay', '400056', 'Maharashtra', '0'),
('0005', 'Ravi', 'Delhi', '100001', 'Delhi', '2000'),
('0006', 'Rukmini', 'Bombay', '400050', 'Maharashtra', '0');
```

client_no	name	address1	address2	city	state	pincode	bal_due
 0001	Ivan	NULL	NULL	Bombay	Maharashtra	400054	15000.00
0002	Vandana	NULL	NULL	Madras	Tamilnadu	780001	0.00
0003	Pramoda	NULL	NULL	Bombay	Maharashtra	400057	5000.00
0004	Basu	NULL	NULL	Bombay	Maharashtra	400056	0.00
0005	Ravi	NULL	NULL	Delhi	Delhi	100001	2000.00
0006	Rukmini	NULL	NULL	Bombay	Maharashtra	400050	0.00

ii.

INSERT INTO Product\_master
(Product\_no, Description, Profit\_percent, Unit\_measure, Qty\_on\_hand, Reorder\_lvl, Sell\_price, Cost\_price)
VALUES
('P00001', '1.44floppies', 5, 'piece', 100, 20, 525, 500),
('P03453', 'Monitors', 6, 'piece', 10, 3, 12000, 11200),
('P06734', 'Mouse', 5, 'piece', 20, 5, 1050, 500),
('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);

Product_no	Description	Profit_percent	Unit_measure	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
 P00001	1.44floppies	5.00	piece	100	20	525.00	500.00
P03453	Monitors	6.00	piece	10	3	12000.00	11200.00
P06734	Mouse	5.00	piece	20	5	1050.00	500.00
P07865	1.22 floppies	5.00	piece	100	20	525.00	500.00
97868	Keyboards	2.00	piece	10	3	3150.00	3050.00
P07885	CD Drive	2.50	piece	10	3	5250.00	5100.00
07965	540 HDD	4.00	piece	10	3	8400.00	8000.00
07975	1.44 Drive	5.00	piece	10	3	1050.00	1000.00
P08865	1.22 Drive	5.00	piece	2	3	1050.00	1000.00

#### Queries 3.

i. select name from client\_master;

ii. select name, city from client\_master;

iii. select Description from Product\_master;

iv. select name from client\_master where city="Bombay";

v. select \* from client\_ master where client\_no = or or client\_no = "0002";

```
mysql> select * from client_master where client_no = "0001" or client_no = "0002";
                                                                      pincode | bal_due
 client_no | name
                        address1 | address2 | city
                                                       l state
  0001
                        NULL
                                   NULL
                                               Bombay
                                                                       400054
                                                                                 15000.00
              Ivan
                                                        Maharashtra
  0002
              Vandana |
                        NULL
                                   NULL
                                                                       780001 |
                                                                                     0.00
                                               Madras |
                                                        Tamilnadu
2 rows in set (0.00 sec)
```

vi. select \* from Product\_master where Description="1.44 drive" or Description="1.22 Drive";

```
mysql> SELECT *
    -> FROM Product_master
    -> WHERE Description IN ('1.44 Drive', '1.22 Drive');
 Product_no | Description | Profit_percent | Unit_measure | Qty_on_hand | Reorder_lv1 | Sell_price | Cost_price
  P07975
              1.44 Drive
                                       5.00 | piece
                                                                                            1050.00 |
                                                                                                         1000.00
                                       5.00 | piece
  P08865
              1.22 Drive
                                                                       2
                                                                                            1050.00 |
                                                                                                         1000.00
                                                                                     3 |
```

vii. select \* from Product\_master where Sell\_price> 5000;

Product_no	Description	Profit_percent	Unit_measure	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
P03453	Monitors	6.00	piece	10	3	12000.00	11200.00
P07885	CD Drive	2.50	piece	j 10	3	5250.00	5100.00
P07965	540 HDD	4.00	piece	10	3	8400.00	8000.00

viii. select \* from client\_master where city in( 'Bombay', 'Delhi', 'Madras');

client_no	name		address2		state 	pincode	• · · · · · · · · · • • · · · · · · · ·
 0001	Ivan	NULL	NULL	Bombay	Maharashtra	400054	15000.00
0002	Vandana	NULL	NULL	Madras	Tamilnadu	780001	0.00
0003	Pramoda	NULL	NULL	Bombay	Maharashtra	400057	5000.00
0004	Basu	NULL	NULL	Bombay	Maharashtra	400056	0.00
0005	Ravi	NULL	NULL	Delhi	Delhi	100001	2000.00
0006	Rukmini	NULL	NULL	Bombay	Maharashtra	400050	0.00

ix. select \* from Product\_master where Sell\_price> 2000 and Sell\_price<= 5000;

sdi> select	* Trom Product	t_master where Sei	11_price> 2000	+	<= 5000; +	<b></b>	<b>.</b>
Product_no	Description	Profit_percent	Unit_measure	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
P07868	Keyboards	2.00	piece	10	3	3150.00	3050.00

x. select \* from client\_master where state != "Maharashtra";

#### Que.1 Using the table client master and product master answer the following queries.

- i. Change the selling price of '1.44 floppy drive to Rs.1150.00
- ii. Delete the record with client 0001 from the client master table.
- iii. Change the city of client\_no'0005' to Bombay.
- iv. Change the bal\_due of client\_no '0001, to 1000.
- v. Find the products whose selling price is more than 1500 and also find the new selling price as original selling price \*15.
- vi. Find out the clients who stay in a city whose second letter is a.
- vii. Find out the name of all clients having 'a' as the second letter in their names.
- viii. List the products in sorted order of their description.
- ix. Count the total number of orders
- x. Calculate the average price of all the products.
- xi. Calculate the minimum price of products.
- xii. Determine the maximum and minimum prices . Rename the tittle as 'max\_price' and min\_price respectively.
- xiii. Count the number of products having price greater than or equal to 1500.

#### Queries:

i. update Product\_master set Sell\_price=1150.00 where Description = '1.44 drive';

Product_no	Description	Profit_percent	Unit_measure	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
 P00001	1.44floppies	5.00	piece	100	20	525.00	500.00
P03453	Monitors	6.00	piece	10	3	12000.00	11200.00
P06734	Mouse	5.00	piece	20	5	1050.00	500.00
P07865	1.22 floppies	5.00	piece	100	20	525.00	500.00
P07868	Keyboards	2.00	piece	10	3	3150.00	3050.00
P07885	CD Drive	2.50	piece	10	3	5250.00	5100.00
P07965	540 HDD	4.00	piece	10	3	8400.00	8000.00
P07975	1.44 Drive	5.00	piece	10	3	1150.00	1000.00
P08865	1.22 Drive	5.00	piece	2	3	1050.00	1000.00

ii. delete from client\_master where client\_no='0001';

client_no	name	address1	address2	city	state	pincode	bal_due
0002	Vandana	NULL	NULL	Madras	Tamilnadu	780001	0.00
0003	Pramoda	NULL	NULL	Bombay	Maharashtra	400057	5000.00
0004	Basu	NULL	NULL	Bombay	Maharashtra	400056	0.00
0005	Ravi	NULL	NULL	Delhi	Delhi	100001	2000.00
0006	Rukmini	NULL	NULL	Bombay	Maharashtra	400050	0.00

iii. update client\_master set city = 'Bombay' where client\_no='0005';

client_no	name	address1	address2	city	state	pincode	bal_due
0002	Vandana	NULL	NULL	Madras	Tamilnadu	780001	0.00
0003	Pramoda	NULL	NULL	Bombay	Maharashtra	400057	5000.00
0004	Basu	NULL	NULL	Bombay	Maharashtra	400056	0.00
0005	Ravi	NULL	NULL	Bombay	Delhi	100001	2000.00
0006	Rukmini	NULL	NULL	Bombay	Maharashtra	400050	0.00

iv. update client\_master set bal\_due = 1000 where client\_no='0001';

client_no	name	address1	address2	city	state 	pincode	bal_due
0001	Ivan	NULL	NULL	Bombay	Maharashtra	400054	1000.00
0002	Vandana	NULL	NULL	Madras	Tamilnadu	780001	0.00
0003	Pramoda	NULL	NULL	Bombay	Maharashtra	400057	5000.00
0004	Basu	NULL	NULL	Bombay	Maharashtra	400056	0.00
0005	Ravi	NULL	NULL	Bombay	Delhi	100001	2000.00
0006	Rukmini	I NULL	I NULL	Bombay	Maharashtra	400050	0.00

v. select Product\_no, Description, Sell\_price, (Sell\_price\*15) as New\_selling\_price from Product\_master where Sell\_price>1500;

```
mysql> select Product_no, Description, Sell_price, (Sell_price*15) as New_selling_price from Product_master where Sell_price>1500;
  Product_no | Description | Sell_price | New_selling_price
  P03453
               Monitors
                               12000.00
  P07868
               Keyboards
                                3150.00
                                                   47250.00
  P07885
                                5250.00
               CD Drive
                                                   78750.00
                                                  126000.00
  P07965
               540 HDD
                                8400.00
  ----- in ant /0 00 ann)
```

vi. select \* from client \_master where city like "\_a%";

client_no	name	address1	address2	city	state	pincode	bal_due
0002	Vandana	NULL	NULL	Madras	Tamilnadu	780001	0.00

vii. select name from client\_master where name like "\_a%";

viii. select \* from Product\_master order by Description;

Product_no	Description	Profit_percent   l	Jnit_measure	Qty_on_hand	Reorder_lvl	Sell_price	Cost_price
P08865	1.22 Drive	5.00   p	oiece	2	3	1050.00	1000.00
P07865	1.22 floppies	5.00	piece	100	20	525.00	500.00
P07975	1.44 Drive	5.00   5	piece	10	3	1150.00	1000.00
P00001	1.44floppies	5.00   1	oiece	100	20	525.00	500.00
P07965	540 HDD	4.00	piece	10	3	8400.00	8000.00
P07885	CD Drive	2.50	oiece	10	3	5250.00	5100.00
P07868	Keyboards	2.00	oiece	10	3	3150.00	3050.00
P03453	Monitors	6.00   1	oiece	10	3	12000.00	11200.00
P06734	Mouse	j 5.00 j	piece	20	5	1050.00	500.00

ix. select sum(Qty\_on\_hand) as Total\_number\_of\_orders from Product\_master;

```
mysql> select sum(Qty_on_hand) as Total_number_of_orders from Product_master;
+-----+
| Total_number_of_orders |
+-----+
| 272 |
+-----+
```

x. select avg(Cost\_price) as Average\_price from Product\_master;

xi. select min (Cost\_price) as Minimum\_price from Product\_master;

xii. select max(Cost\_price) as max\_price, min (Cost\_price) as min\_price from Product\_master;

```
[mysql> select max(Cost_price) as max_price, min(Cost_price) as min_price from Product_master;
+-----+
| max_price | min_price |
+-----+
| 11200.00 | 500.00 |
+-----+
```

xiii. select count(\*) as Product\_count from Product\_master where Sell\_price>1500;

```
[mysql> select count(*) as Product_count from Product_master where Sell_price>1500;
+-----+
| Product_count |
+-----+
| 4 |
+-----+
```

#### **Question:**

- Find average sell-price from product master.
- 2 Find minimum of balance due from client-master.
- 3 Find the number of products from product-master.
- Find no of rows in table client master.
- 5 Find total balance due from client master.
- 6 Find absolute value of (-15).
- 7 Find square of 3.
- 8 Find round (15.19,1).
- 9 Find square root of 25.
- 10 Find lower case of 'MTECH".
- 11 Find upper case of "gentleman".
- 12 Write in proper case 'MTECH".

### Queries:

select avg(Sell\_price) as Average\_price from Product\_master;

```
[mysql> select avg(Sell_price) as Average_price from Product_master;
+-----+
| Average_price |
+-----+
| 3677.777778 |
+------+
```

select min(bal\_due) as min\_bal\_due from client\_master;

```
mysql> select min(bal_due) as min_bal_due from client_master;
+-----+
| min_bal_due |
+-----+
| 0.00 |
+-----+
```

3. select count(\*) as Total\_products from Product\_master;

```
[mysql> select count(*) as Total_products from Product_master;
+-----+
| Total_products |
+-----+
| 9 |
+-----+
```

select count(\*) as Total\_rows from client\_master;

```
mysql> select count(*) as Total_rows from client_master;
+----+
| Total_rows |
+-----+
| 6 |
+-----+
```

5. select sum (bal\_due) as Total\_bal\_due from client\_master;

```
mysql> select sum(bal_due) as Total_bal_due from client_master;
+-----+
| Total_bal_due |
+-----+
| 8000.00 |
+-----+
```

6. select abs(-15) as Absolute\_value;

```
[mysql> select abs(-15) as

[ -> Absolute_value;

+-----+

| Absolute_value |

+-----+

| 15 |

+-----+
```

7. select 3\*3 as Square\_of\_3;

```
[mysql> select 3*3 as Square_of_3;
+----+
| Square_of_3 |
+-----+
| 9 |
+-----+
```

8. select round (15.19,1) as Rounded\_value;

9. select sqrt(25) as Square\_root\_of\_25;

10. select lower ('MTECH') as Lower\_case\_MTECH;

```
[mysql> select lower('MTECH') as Lower_case_MTECH;
+-----+
| Lower_case_MTECH |
+-----+
| mtech |
+------+
```

11. select upper( 'gentleman') as Upper\_case\_MTECH;

```
mysql> select upper('gentleman') as Upper_case_MTECH;
+-----+
| Upper_case_MTECH |
+-----+
| GENTLEMAN |
+-----+
```

12. select concat( upper( left( 'MTECH', 1)), lower ( substring( 'MTECH', 2))) as Proper\_case\_MTECH;

#### **Ouestion:**

- 1. Print the information from sales order table for orders placed in the month of January.
- 2. Display the order no & day on which clients placed their order.
- 3. Display the month and date when the order must be delivered.
- 4. Display the order date in the format DDMMYY.
- 5. Find the date i1 days after today's date.
- 6. Find the no of days elapsed between today's date and delivery date of the orders placed by the clients.
- 7. Print the description and total qty sold for each product in product master.
- 8. Find the sum total of all the billed orders for the month of January.

#### Create sales order Table:

create table sales\_order Order\_no int(6), Client\_id int(5), Order\_date date, Delivery\_date date, Billed\_amount decimal (10,2), Quantity\_sold int (5));

mysql> select \* from sales\_order
 -> :

Quantity_sole	Billed_amount	Delivery_date	Order_date	Client_id	Order_no
!	5000.00	2024-01-10	2024-01-05	1	1001
10	7500.00	2024-01-17	2024-01-12	2	1002
20	12000.00	2024-01-20	2024-01-15	3	1003
;	3000.00	2024-02-07	2024-02-02	4	1004
	4500.00	2024-02-12	2024-02-05	5	1005
	2000.00	2024-01-25	2024-01-18	1	1006
	6000.00	2024-01-27	2024-01-22	2	1007
•	8000.00	2024-01-30	2024-01-25	3	1008
19	10000.00	2024-03-05	2024-03-01	4	1009
	7000.00	2024-03-10	2024-03-05	5 İ	1010

10 rows in set (0.00 sec)

### Queries:

i. select \* from sales\_order where month(Order\_date)=1;

Order_no	Client_id	Order_date	Delivery_date	Billed_amount	Quantity_sold
1001	1	2024-01-05	2024-01-10	5000.00	5
1002	2	2024-01-12	2024-01-17	7500.00	10
1003	j 3	2024-01-15	2024-01-20	12000.00	20
1006	1	2024-01-18	2024-01-25	2000.00	2
1007	2	2024-01-22	2024-01-27	6000.00	6
1008	3	2024-01-25	2024-01-30	8000.00	9

ii. select Order\_no, dayname (Order\_date) as day from sales\_order;

```
mysql> select Order_no, dayname(Order_date) as day from sales_order;
  Order_no | day
      1001 | Friday
      1002 | Friday
      1003 |
             Monday
      1004 | Friday
      1005 | Monday
      1006 | Thursday
             Monday
      1007 |
      1008 |
             Thursday
             Friday
      1009
      1010 |
             Tuesday
```

iii. select Order\_no, monthname (Delivery\_date) as Month, dayname (Delivery\_date) as Day from sales\_order;

Order_no	Month	Day				
1001	January	Wednesday	7			
1002	January	Wednesday				
1003	January	Saturday				
1004	February	Wednesday				
1005	February	Monday				
1006	January	Thursday				
1007	January	Saturday				
1008	January	Tuesday				
1009	March	Tuesday				
1010	March	Sunday				

iv. select Order\_no, date\_format (Order\_date, '%d%m%') as Formated\_order\_date from sales\_order;

```
mysql> select Order_no, date_format(Order_date, '%d%m%y') as Formated_order_date from sales_order;
 Order_no | Formated_order_date |
      1001 | 050124
      1002
            120124
      1003
            150124
      1004
            020224
      1005
            050224
      1006
            180124
      1007
           | 220124
      1008 | 250124
      1009 |
             010324
      1010 | 050324
```

v. select curdate() as Today\_date, date\_add(curdate(), interval 11 day) as Date\_of\_11\_days\_after;

vi. select Order\_no, abs(datediff(Delivery\_date, curdate())) as elapsed\_days from sales\_order;

```
[mysql> select Order_no, abs(datediff(Delivery_date, curdate())) as elapsed_days from sales_order;
  Order_no | elapsed_days |
      1001 |
                      317
      1002 |
                      310
      1003 |
                      307
      1004 |
                      289
      1005 |
                      284
      1006
                      302
                      300
      1007
      1008 |
                      297
      1009
                      262
      1010
                      257
```

vii. select Description, Qty\_on\_hand from Product\_master;

```
[mysql> select Description, Qty_on_hand from Product_master;
                 | Qty_on_hand |
  Description
  1.44floppies
                           100
  Monitors
                            10 |
                            20 |
  Mouse
  1.22 floppies |
                           100
  Keyboards
                            10 |
  CD Drive
                            10
  540 HDD
                            10
  1.44 Drive
                            10
  1.22 Drive
                             2
```

viii. select sum (Billed\_amount) from sales\_order where month (Order\_date)=1;

```
[mysql> select sum(Billed_amount) from sales_order where month(Order_date)=1;
+-----+
| sum(Billed_amount) |
+-----+
| 40500.00 |
+------+
```