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Experiment No. 4

Aim: To practise Data Retrieval and Date Commands on Constraints Table

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EXERCISE ON COMPUTATIONS IN TABLE DATA

1)Find the names of all clients having 'a' as the second letter in their names.

```
mysql> select name from client_master where name like '_a%';
+-----------------+
| name            |
+-----------------+
| Vandana Saitwal |
| Basu Navindgi   |
| Ravi Sreedharan |
+-----------------+
    3   rows in set (0.00 sec)
```

2)Find out the clients who stay in a city whose second letter is 'a'.

```
mysql> select city from client_master where city like '_a%';
+--------+
| city   |
+--------+
| Madras |
+--------+
    1   row in set (0.00 sec)
```

3)Find the list of all clients who stay in 'Bombay' or 'Delhi'

```
mysql> select * from client_master where city='Bombay' or city='Delhi';
+----------   ----------------+------         ---------+----------- +---------
-          +--                     +          --                   - +
| client_no | name            | city   | pincode | state       | bal_due |
+----------   ----------------+------         ---------+----------- +---------
-          +--                     +          --                   - +
| C00001    | Ivan Bayross     | Bombay | 400054 | Maharashtra | 15000.00   |
| C00003    | Pramada Jasgute | Bombay | 400057 | Maharashtra | 5000.00 |
| C00004    | Basu Navindgi  | Bombay | 400056 | Maharashtra |         0.00 |
| C00005    | Ravi Sreedharan | Delhi | 100001 | Delhi            | 2000.00 |
| C00006    | Rukmini        | Bombay | 400050 | Maharashtra |          0.00 |
+----------   ----------------+------         ---------+----------- +---------
-          +--                     +          --                   - +
    4   rows in set (0.00 sec)
```

4)Print the list of clients whose bat due is greater than value 10000.

```
mysql> select * from client_master where bal_due > 10000;

----------+--------------+--------+---------+-------------+----------+
| client_no | name         | city  | pincode | state        | bal_due |
+----------- +--------------+--------+---------+-------------+   ----------+
| C00001   | Ivan Bayross | Bombay | 400054 | Maharashtra | 15000.00 |
+----------- +--------------+--------+---------+-------------+   ----------+
```

5)Print the information from sales order table for orders placed in the month of January.

```
mysql> select * from sales_order where month(order_date)=1;
+----------+------------+-----------+-------------+-----------+-----------+------------+--------------+
| order_no | order_date | client_no | salesman_no | dely_type | billed_yn | dely_date | order_status |
+ ----------+ ------------+ -----------+------------     +----------- +---------- +-----------      +--------------   +
| O19001     | 1996-01-12 | C00001    | S00001   | F          | N        | 1996-01-20 | In Process  |
| O19002     | 1996-01-25 | C00002    | S00002   | P          | N        | 1996-01-27 | Cancelled  |
+ ----------+ ------------+ -----------+------------     +----------- +---------- +-----------      +--------------   +
2 rows in set (0.00 sec)
```

6)Display the order information for client_no 'CO0001' and 'C00002'.

```
mysql> select * from sales_order where client_no='C00001' or client_no='C00002';
+----------+------------+-----------+-------------+-----------+-----------+------------+--------------+
| order_no | order_date | client_no | salesman_no | dely_type | billed_yn | dely_date | order_status |
+  ----------+ ------------+ -----------+------------     +----------- +---------- +-----------       +--------------   +
| O19001   | 1996-01-12 | C00001    | S00001     | F        | N        | 1996-01-20 | In Process   |
| O19002   | 1996-01-25 | C00002    | S00002     | P        | N        | 1996-01-27 | Cancelled   |
| O19003   | 1996-04-03 | C00001    | S00001     | F        | Y        | 1996-04-07 | Fulfilled  |
+  ----------+ ------------+ -----------+------------     +----------- +---------- +-----------       +--------------   +
3 rows in set (0.01 sec)
```

7)Find products whose selling price is greater than 2000 and less than or equal to 5000.

```
mysql> select * from product_master where sell_price > 2000 and sell_price <= 5000;
+------------+-------------+----------------+--------------+-------------+-------------+------------+------------+
| 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 |
+------------ + -------------+----------------   +--------------+-------------+-------------   +-----------+-----------          +
1 row in set (0.00 sec)
```

8)Find products whose selling price is more than 1500. Calculate a new selling price as, original selling price * .15. Rename the new column in the above query as new_price.

```
mysql> alter table product_master add column new_price int;
Query OK, 0 rows affected (0.07 sec) Records: 0 Duplicates: 0
Warnings: 0

mysql> update product_master set new_price=1.15*sell_price where sell_price>1500;
Query OK, 4 rows affected (0.01 sec)
Rows matched: 4 Changed: 4 Warnings: 0

mysql> select * from product_master;
+------------+---------------+----------------+--------------+-------------+-------------+------------+------------+-----------+
| product_no | description  | profit_percent | unit_measure | qty_on_hand | reorder_lvl | sell_price |
cost_price | new_price |
+------------+---------------+----------------+--------------+-------------+-------------+------------+------------+-----------+
| P00001     | 1.44 Floppies |          5.00 | Piece       |        100 |         20 |      525.00 |      500.00 |      NULL |
| P03453     | Monitors         |        6.00 | Piece          |        10 |           3 | 12000.00 |       11280.00 |  13800 |
| P06734     | Mouse            |        5.00 | Piece          |       20 |            5 |  1050.00 |       1000.00 |   NULL |
                                                                                                                     NULL
| P07865  | 1.22 Floppies |             5.00 | Piece          |       100 |                20 |  525.00 |  500.00 |    |
| P07868     | Keyboards       |        2.00 | Piece          |        10 |           3 |   3150.00 |       3050.00 |    3622 |
| P07885     | CD Drive       |        2.50 | Piece          |       10 |            3 |  5250.00 |       5100.00 |   6037 |
| P07965     | 540 HDD        |        4.00 | Piece          |        10 |           3 |  8400.00 |       8000.00 |     9660 |
| P07975     | 1.44 Drive      |       5.00 | Piece          |        10 |           3 |  1050.00 |       1000.00 |    NULL |
| P08865     | 1.22 Drive      |       5.00 | Piece          |         2 |           3 |  1050.00 |       1000.00 |    NULL |
+-----------   --------------+-------------        +-------------+----------     +----------        -----------+-------
-              +                          ---        -                          --     ---             +-----                  +-----------      +
       9     rows in set (0.00 sec)
```

9)List the names, city and state of clients who are not in the state of 'Maharashtra'.

```
mysql> select name,city,state from client_master where state!='Maharashtra';
+-----------------+-------- +------------ +
| name          | city   | state       |
+-----------------+-------- +------------ +



+-----------------+--------+------------+
2 rows in set (0.00 sec)
```

10)Count the total number of orders.

```
mysql> select count(order_no) from sales_order;
+-----------------+
| count(order_no) |
+-----------------+
|             6 |
+-----------------+
       1     row in set (0.00 sec)
```

11)Calculate the average price of al! the products.

```
mysql> select avg(sell_price) from product_master;
+-----------------+
| avg(sell_price) |
+-----------------+
|     3666.666667 |
+-----------------+
       1     row in set (0.00 sec)
```

12)Determine the maximum and minimum product prices. Rename the output as max_price and min price respectively.

```
mysql> select max(sell_price) as max_price, min(sell_price) as min_price from product_master;
+-----------+-----------+
| max_price | min_price |
  ----------+---------
+                   --      +
| 12000.00 |       525.00 |
  ----------+---------
+                   --      +
      1     row in set (0.00 sec)
```

13)Count the number of products having price greater than or equal to 1500.

```
mysql> select count(product_no) from product_master where sell_price>=1500;
+-------------------+
| count(product_no) |
+-------------------+
|               4 |
+-------------------+
      1     row in set (0.00 sec)
```

14)Find all the products whose qty_on_hand is less than reorder level..

```
mysql> select * from product_master where qty_on_hand < reorder_lvl;

+------------+-------------+----------------+--------------+-------------+-------------+------------+------------+-----------+
| product_no | description | profit_percent | unit_measure | qty_on_hand | reorder_lvl | sell_price |
cost_price | new_price |
+------------ + -------------+----------------    +-------------- +------------- +-------------      + -----------+-----------        +---------         +
| P08865       | 1.22 Drive |          5.00 | Piece       |          2 |          3 |    1050.00 |   1000.00 |    NULL |
+------------ + -------------+----------------    +-------------- +------------- +-------------      + -----------+-----------        +---------         +
1 row in set (0.00 sec)
```

EXERCISE ON DATE MANIPULATION

1)Display the order number and day on which clients placed their order.

```
mysql> select order_no, order_date from sales_order;
+----------+------------+
| order_no | order_date |
+----------+ ------------+
| O19001  | 1996-01-12 |
| O19002  | 1996-01-25 |
| O19003  | 1996-04-03 |
| O19008  | 1996-05-24 |
| O46865  | 1996-02-18 |
| O46866  | 1996-05-20 |
+----------+ ------------+
    5     rows in set (0.00 sec)
```

2)Display the month (in alphabets) and date when the order must be delivered.

```
mysql> select monthname(order_date), order_date from sales_order;
+-----------------------+------------+
| monthname(order_date) | order_date |
+--------------------
--                      + ------------+
| January             | 1996-01-12 |
| January             | 1996-01-25 |
| April               | 1996-04-03 |
| May                 | 1996-05-24 |
| February            | 1996-02-18 |
| May                   | 1996-05-20 |
+--------------------     + ------------+
    6     rows in set (0.00 sec)
```

3)Display the order_date in the format 'DD-Month-YY'. e.g. 12-February-96

```
mysql> select date_format(order_date,'%e-%M-%y') from sales_order;
+------------------------------------+
| date_format(order_date,'%e-%M-%y') |
+------------------------------------+
| 12-January-96                |
| 25-January-96                |
| 3-April-96                   |
| 24-May-96                    |
| 18-February-96               |
| 20-May-96                    |
+------------------------------------+
    7     rows in set (0.00 sec)
```

4)Find the date, 15 days after today's date.

```
mysql> select date_add(curdate(),interval 15 day);
+-------------------------------------+
| date_add(curdate(),interval 15 day) |
+-------------------------------------+
| 2020-04-02                          |
+-------------------------------------+
    1     row in set (0.00 sec)
```

5)Find the number of days elapsed between today's date and the delivery date of the orders placed by the clients.

```
mysql> select datediff(curdate(), dely_date) from sales_order;
+--------------------------------+
| datediff(curdate(), dely_date) |
  -------------------------------
+                               -+
 |                       8824 |
 |                       8817 |
 |                       8746 |
 |                       8697 |
 |                       8793 |
 |                       8701 |
  -------------------------------
+                               -+
6 rows in set (0.00 sec)
```

Conclusion:

Thus from the given assignment we learn the various data computation and date functions in MySQl.