

# SQL Concepts

## Prabhakar

1. Assuming you are ready with the ER Model (from Morning session Assignment), transform it into a Database schema. Create tables keeping up good practices and send me the create scripts you've written.

- The script file contains all the creating database, table and inserting queries.

Table with values:

```
MySQL Shell
MySQL localhost:3306 ssl sampledb SQL > select * from category;

+-----+-----+
| CCODE | CNAME |
+-----+-----+
| 1     | FOOD ITEMS |
| 2     | COSMETICS  |
| 3     | CLOTHES    |
| 4     | TOYS       |
+-----+-----+
4 rows in set (0.0010 sec)

MySQL localhost:3306 ssl sampledb SQL > select * from products;
ERROR: 1146 (42S02): Table 'sampledb.products' doesn't exist
MySQL localhost:3306 ssl sampledb SQL > select * from product;

+-----+-----+-----+-----+
| PCODE | PNAME | UNIT_PRICE | CCODE |
+-----+-----+-----+-----+
| 1     | SOAP  | 50         | 2     |
| 2     | BISCUIT | 20        | 1     |
| 3     | PERFUME | 500       | 2     |
| 4     | SHIRT  | 1200      | 3     |
| 5     | LIPSTICK | 120       | 2     |
+-----+-----+-----+-----+
5 rows in set (0.0081 sec)

MySQL localhost:3306 ssl sampledb SQL > select * from location;

+-----+-----+
| LCODE | LNAME |
+-----+-----+
| 101   | CHENNAI |
| 102   | TRICHY  |
| 103   | BANGALORE |
+-----+-----+
3 rows in set (0.0066 sec)

MySQL localhost:3306 ssl sampledb SQL > select * from customer;

+-----+-----+-----+-----+-----+-----+
| CID | CNAME | DOB | GENDER | MOB_NO | LCODE |
+-----+-----+-----+-----+-----+-----+
| 201 | HANEN | 1998-09-20 | M | 9688441160 | 102 |
| 202 | VIPPIN | 2000-01-20 | M | 9685441160 | 103 |
| 203 | LINI | 1990-01-22 | F | 9656741160 | 101 |
| 204 | VINI | 1987-05-10 | F | 6788441160 | 103 |
| 205 | ANI | 1998-09-20 | F | 9688123460 | 102 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0084 sec)
```

```
MySQL Shell
MySQL localhost:3306 ssl sampledb SQL > select * from sales_executive;

+-----+-----+-----+-----+-----+
| SID | SNAME | DOB | GENDER | MOB_NO |
+-----+-----+-----+-----+-----+
| 301 | PRABA | 1998-09-20 | M | 9688441160 |
| 302 | SQUIYA | 2001-06-19 | F | 6377741160 |
| 303 | AJAY | 1997-01-07 | M | 9688441135 |
| 304 | PARTHI | 1997-01-07 | M | 9688441135 |
+-----+-----+-----+-----+-----+
4 rows in set (0.0006 sec)

MySQL localhost:3306 ssl sampledb SQL > select * from sell;

+-----+-----+-----+-----+-----+
| SID | PCODE | CID | DOP | NOU |
+-----+-----+-----+-----+-----+
| 301 | 1     | 202 | 2021-01-02 | 2 |
| 301 | 2     | 201 | 2021-01-05 | 5 |
| 301 | 5     | 205 | 2021-01-02 | 2 |
| 302 | 1     | 201 | 2021-01-03 | 1 |
| 302 | 1     | 205 | 2021-01-02 | 2 |
| 303 | 1     | 205 | 2021-01-02 | 2 |
| 303 | 3     | 203 | 2020-12-19 | 10 |
+-----+-----+-----+-----+-----+
7 rows in set (0.0006 sec)
```

2. Write a query to retrieve the most sold product per day in a specific location (take any location) in the last week.

- Most sold products in a location (Trichy - 102) in last week.

Query:

```
select P.PCODE, P.PNAME, T.DOP AS DATE_OF_PURCHASE, max(TOT_UNITS) AS
MAX_UNITS_SOLD_PERDAY from PRODUCT P INNER JOIN (select sum(NU) as TOT_UNITS,
PCODE, DOP from SELL S, CUSTOMER C where C.LCODE="102" and C.CID=S.CID and DOP
between date_sub(current_date(),interval 7 DAY) and current_date() group by DOP,PCODE)
T ON T.PCODE = P.PCODE;
```

```
MySQL localhost:3306 ssl sampled SQL > select P.PCODE, P.PNAME, T.DOP AS DATE_OF_PURCHASE, max(TOT_UNITS) AS MAX_UNITS_SOLD_PERDAY from PRODUCT P INNER JOIN (select su
m(NU) as TOT_UNITS, PCODE, DOP from SELL S, CUSTOMER C where C.LCODE="102" and C.CID=S.CID and DOP between date_sub(current_date(),interval 7 DAY) and current_date() grou
p by DOP,PCODE) T ON T.PCODE = P.PCODE;
+-----+-----+-----+-----+
| PCODE | PNAME | DATE_OF_PURCHASE | MAX_UNITS_SOLD_PERDAY |
+-----+-----+-----+-----+
| 2 | BISCUIT | 2021-01-05 | 5 |
+-----+-----+-----+-----+
1 row in set (0.0010 sec)
```

3. Write a query to list all the sales persons details along with the count of products sold by them (if any) till current date.

Query:

```
SELECT SE.*, IFNULL(T.CNT, 0) AS NO_OF_PRODUCT_SOLD FROM SALES_EXECUTIVE SE LEFT
JOIN
(SELECT SID, COUNT(DISTINCT PCODE) AS CNT FROM SELL S GROUP BY SID) T
ON T.SID = SE.SID;
```

```
MySQL localhost:3306 ssl sampled SQL > SELECT SE.*, IFNULL(T.CNT, 0) AS NO_OF_PRODUCT_SOLD FROM SALES_EXECUTIVE SE LEFT JOIN (SELECT SID, COUNT(DISTINCT PCODE) AS CNT
FROM SELL S GROUP BY SID) T ON T.SID = SE.SID;
+-----+-----+-----+-----+-----+-----+
| SID | SNAME | DOB | GENDER | MOB_NO | NO_OF_PRODUCT_SOLD |
+-----+-----+-----+-----+-----+-----+
| 301 | PRABA | 1998-09-20 | M | 9688441160 | 3 |
| 302 | SOJNYA | 2001-06-19 | F | 6377741160 | 1 |
| 303 | AJAY | 1997-01-07 | M | 9688441135 | 2 |
| 304 | PARTHI | 1997-01-07 | M | 9688441135 | 0 |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.0009 sec)
```

Note: All the queries are in the script file that i have attached.