Assignment

Dbms LAB queries;

Name- Mohammad Farhan khan

Roll no. 12css32

Submitted to:Shahzad SIR

Creating tables:

1) SALES_REP1232
```
CREATE TABLE SALES_REP1232
(
REPCODE INT PRIMARY KEY,
REPNAME VARCHAR(25),
SALARY INT,
COMNAME VARCHAR(45),
foreign key (COMNAME) references COMPANY1232(COMNAME) ON
UPDATE CASCADE ON DELETE CASCADE
);
```

2) PRODUCT1232
```
CREATE TABLE PRODUCT1232
(
PCODE VARCHAR(10) PRIMARY KEY,
PNAME VARCHAR(25),
PCOM REAL
);
```

3) OWNS1232 :

```
CREATE TABLE OWNS1232
(
COMNAME VARCHAR(45),
PCODE VARCHAR(10),
foreign key (COMNAME) references COMPANY1232 (COMNAME) ON UPDATE
CASCADE ON DELETE CASCADE,
foreign key (PCODE) references PRODUCT1232 (PCODE) ON
UPDATE CASCADE ON DELETE CASCADE
);
```

4) COMPANY1232 :

```
CREATE TABLE COMPANY1232
(
COMNAME VARCHAR(45) PRIMARY KEY,
COMHQ VARCHAR(45)
);
```

5). SALES1232:
CREATE TABLE SALES1232
(
REPCODE INT,
PCODE VARCHAR(10),
QTYSOLD INT,
foreign key (REPCODE) references SALES_REP1232 (REPCODE) ON UPDATE CASCADE ON DELETE CASCADE,
foreign key (PCODE) references PRODUCT1232 (PCODE) ON UPDATE CASCADE ON DELETE CASCADE
);

ENTERIES AFTER INSERTION IN THE TABLE

```
mysql> select * from sales_rep1232;
+---------+---------+--------+-------------------+
| REPCODE | REPNAME | SALARY | COMNAME           |
+---------+---------+--------+-------------------+
|     100 | PRERIT  |  45000 | ABC CORPORATION   |
|     101 | AAMIR   |  35000 | ABC CORPORATION   |
|     102 | SAIF    |  30000 | DGL FOOD PRODUCTS |
|     103 | RAHUL   |  40000 | DGL FOOD PRODUCTS |
+---------+---------+--------+-------------------+
4 rows in set (0.00 sec)

mysql> select * from company1232;
+-------------------+---------+
| COMNAME           | COMHQ   |
+-------------------+---------+
| ABC CORPORATION   | MUMBAI  |
| DGL FOOD PRODUCTS | KOLKATA |
+-------------------+---------+
2 rows in set (0.00 sec)

mysql> select * from product1232;
+-------+-----------------+------+
| PCODE | PNAME           | PCOM |
+-------+-----------------+------+
| P1    | Health Drink    |  0.3 |
| P2    | Butter          |  0.1 |
| P3    | BABY Food       | 0.15 |
| P4    | TINNED MUSHROOM | 1000 |
+-------+-----------------+------+
4 rows in set (0.00 sec)

mysql> select * from owns1232;
+-------------------+-------+
| COMNAME           | PCODE |
+-------------------+-------+
| ABC CORPORATION   | P1    |
| ABC CORPORATION   | P2    |
| ABC CORPORATION   | P3    |
| DGL FOOD PRODUCTS | P1    |
| DGL FOOD PRODUCTS | P2    |
| DGL FOOD PRODUCTS | P4    |
+-------------------+-------+
6 rows in set (0.00 sec)

mysql>
```

```
mysql> select * from sales1232;
+---------+-------+---------+
| REPCODE | PCODE | QTYSOLD |
+---------+-------+---------+
|     100 | P1    |     200 |
|     100 | P3    |      20 |
|     100 | P2    |     300 |
|     101 | P3    |     250 |
|     102 | P1    |     400 |
|     102 | P4    |     200 |
|     103 | P4    |     500 |
+---------+-------+---------+
7 rows in set (0.00 sec)

mysql>
```

QUERIES

1. LIST THE PRODUCT WISE SALE OF ABC CORPORATION.

select p.PNAME,sum(s.QTYSOLD) as Total   from PRODUCT1232 as p,SALES1232 as s where p.PCODE in (select PCODE from OWNS1232 where COMNAME='ABC CORPORATION') and s.REPCODE in(select REPCODE from SALES_REP1232 where COMNAME='ABC CORPORATION')and s.PCODE=p.PCODE group by(p.PNAME);

```
mysql> select p.PNAME,sum(s.QTYSOLD) as Total  from PRODUCT1232 as p,SALES1232 as s where p.PCODE in (select PCODE from
SALES_REP1232 where COMNAME='ABC CORPORATION' )and s.PCODE=p.PCODE group by(p.PNAME);
+--------------+--------+
| PNAME        | Total  |
+--------------+--------+
| BABY Food    |   270  |
| Butter       |   300  |
| Health Drink |   200  |
+--------------+--------+
3 rows in set (0.05 sec)

mysql> _
```

2. LIST THE COMMISSION EARNED BY SELLING PRODUCT P1.

select re.COMNAME,sum(s.QTYSOLD*p.PCOM) from SALES1232 as s,PRODUCT1232 as p,SALES_REP1232 as re where p.PCODE='P1' and s.REPCODE=re.REPCODE and p.PCODE=s.PCODE group by (re.COMNAME);

```
mysql> select re.COMNAME,sum(s.QTYSOLD*p.PCOM) from SALES1232 as s,PRODUCT1232 as p,SALES_REP1232 as re where p.PCODE='P1'
+-------------------+-----------------------+
| COMNAME           | sum(s.QTYSOLD*p.PCOM) |
+-------------------+-----------------------+
| ABC CORPORATION   |                    60 |
| DGL FOOD PRODUCTS |                   120 |
+-------------------+-----------------------+
2 rows in set (0.00 sec)

mysql>
```

3. LIST THE REPRESENTIVES WORKING IN 'DGL FOOD PRODUCTS'.

select REPNAME fromSALES_REP1232 where COMNAME='DGL FOOD PRODUCTS';

```
mysql> select REPNAME from SALES_REP1232 where COMNAME='DGL FOOD PRODUCTS';
+---------+
| REPNAME |
+---------+
| SAIF    |
| RAHUL   |
+---------+
2 rows in set (0.00 sec)
```

4. LIST THE SIMILAR PRODUCTS THAT ARE MANUFACTURED BY DIFFERENT COMPANIES.

select PNAME from PRODUCT1232 where PCODE in (select pcode from owns1232 group by(pcode) having count(pcode)>1);

```
mysql> select PNAME from PRODUCT1232  where PCODE in (select pcode from owns1232 group by(pcode) having count(pcode)>1);
+--------------+
| PNAME        |
+--------------+
| Health Drink |
| Butter       |
+--------------+
2 rows in set (0.00 sec)

mysql>
```

5. LIST THE REPRESENTATIVES WHO ARE SELLING THE SIMILAR PRODUCTS OF DIFFERENT COMPANIES.

select REPNAME from SALES_REP1232 where REPCODE in (select REPCODE from SALES1232 where PCODE in (select PCODE from OWNS1232 group by(PCODE) having count(PCODE)>1));

```
mysql> select REPNAME from SALES_REP1232 where REPCODE in (select REPCODE from SALES1232 where PCODE in (select PCODE from OWNS
    -> #
+----------+
| REPNAME |
+----------+
| PRERIT  |
| AAMIR   |
| SAIF    |
+----------+
3 rows in set (0.02 sec)
```

6. LIST THE EARNING FROM BUTTER SELLING.

select sum(QTYSOLD)*PCOM as earning,PCOM from sales1232 join product1232 on product1232.pcode=sales1232.pcode and pname='Butter';

```
mysql> select  sum(QTYSOLD)*PCOM as earning,PCOM  from sales1232 join product1232 on product1232.pcode=sales1232.pcode and
+---------+------+
| earning | PCOM |
+---------+------+
|      30 | 0.1  |
+---------+------+
1 row in set (0.00 sec)

mysql>
```

7. LIST THE PRODUCT SOLD BY REPRESENTATIVE AAMIR.

select pname from product1232 where pcode in(select pcode from sales_rep1232 join sales1232 on sales_rep1232.repcode=sales1232.repcode and repname='AAMIR');

```
mysql> select pname from product1232 where pcode in(select pcode from sales_rep1232 join sales1232 on sales_rep1232.repcode=sal
    -> #
+-----------+
| pname     |
+-----------+
| Butter    |
| BABY Food |
+-----------+
2 rows in set (0.00 sec)
```

8. LIST THE REPRESENTATIVES SELLING ONLY ONE PRODUCT.

select repname from sales_rep1232 where repcode in (select repcode from sales1232 group by (repcode) having count(repcode)=1);

```
mysql> select repname from sales_rep1232 where repcode in ( select repcode from sales1232 group by (repcode) having count(repco
    -> #
+---------+
| repname |
+---------+
| RAHUL   |
+---------+
1 row in set (0.00 sec)
```

9. LIST THE INCOME OF THAT REPRESENTATIVE WHO IS DRAWING MAXIMMUM SALARY(INCOME=SALARY+COMMISSION*QUANTITY SOLD).

select salary+q_total from sales_rep1232 natural join (select repcode,sum(qtysold*pcom) as q_total from sales1232 natural join product1232 group by (repcode)) as m having max(salary);

```
mysql> select salary+q_total from sales_rep1232 natural join (select repcode,sum(qtysold*pcom) as q_total from sales1232 natura
    -> #
+----------------+
| salary+q_total |
+----------------+
|          45063 |
+----------------+
1 row in set (0.00 sec)
```

10. LIST THE REPRESENTATIVE NAME, COMPANY NAME, PRODUCT NAME AND SALE OF PRODUCT WHOSE COMMISSION IS MINIMUM.

select repname,comname,pname,pcom*qtysold from product1232 natural join sales1232 natural join sales_rep1232 where pcom=(select min(pcom) from product1232);

```
mysql> select repname,comname,pname,pcom*qtysold from product1232 natural join sales1232 natural join sales_rep1232 where pcom=
    -> #
+---------+----------------+---------+-------------+
| repname | comname        | pname   | pcom*qtysold |
+---------+----------------+---------+-------------+
| AAMIR   | ABC CORPORATION | Butter  |          30 |
+---------+----------------+---------+-------------+
1 row in set (0.00 sec)
```

11. LIST THE PRODUCT DETAILS OF ABC CORPORATION.

select product1232.pcode as product_code,product1232.pname as product_name,product1232.pcom as commission from product1232 join owns1232 on product1232.pcode =owns1232.pcode and owns1232.comname='abc corporation';

```
mysql> select pcode,pname,pcom from product1232 natural join owns1232 where comname='abc corporation';
+-------+-------------+------+
| pcode | pname       | pcom |
+-------+-------------+------+
| P1    | Health Drink | 0.3  |
| P2    | Butter      | 0.1  |
| P3    | BABY Food   | 0.15 |
+-------+-------------+------+
3 rows in set (0.00 sec)
```

12. LIST THE COMPANY DETAILS IN WHICH THE REPRESENTATIVE DRAWING MAXIMUM SALARY.

```
select sales_rep1232.comname as
company_name,product1232.pname as
products_manufactured_are,company1232.comhq as
headquarter_in from sales_rep1232 join company1232
on sales_rep1232.comname=company1232.comname join
owns1232 on owns1232.comname=
sales_rep1232.comname
join product1232 on product1232.pcode =owns1232.pcode
and sales_rep1232.salary in (select max(sales_rep1232.salary)
from sales_rep1232);
```

```
mysql> SELECT SALES_REP1232.COMNAME AS
    -> COMPANY_NAME,PRODUCT1232.PNAME AS
    -> PRODUCTS_MANUFACTURED_ARE,COMPANY1232.COMHQ AS
    -> HEADQUARTER_IN FROM SALES_REP1232 JOIN COMPANY1232
    -> ON SALES_REP1232.COMNAME=COMPANY1232.COMNAME JOIN
    -> OWNS1232 ON OWNS1232.COMNAME=
    -> SALES_REP1232.COMNAME
    -> JOIN PRODUCT1232 ON PRODUCT1232.PCODE =OWNS1232.PCODE
    -> AND SALES_REP1232.SALARY IN (SELECT MAX(SALES_REP1232.SALARY)
    -> FROM SALES_REP1232);
+------------------+---------------------------+----------------+
| COMPANY_NAME     | PRODUCTS_MANUFACTURED_ARE | HEADQUARTER_IN |
+------------------+---------------------------+----------------+
| ABC CORPORATION  | Health Drink              | MUMBAI         |
| ABC CORPORATION  | Butter                    | MUMBAI         |
| ABC CORPORATION  | BABY Food                 | MUMBAI         |
+------------------+---------------------------+----------------+
3 rows in set (0.00 sec)
```

13. LIST THE COMMISSION ON MAXIMUM SELLING PRODUCT.

select product1232.pname as
max_selling_product,sum(sales1232.qtysold) as quantity_sold
,sum(sales1232.qtysold) *product1232.pcom as total_commission
from product1232 join sales1232 on
sales1232.pcode=product1232.pcode group by sales1232.pcode
order by quantity_sold desc limit 1;

```
mysql> SELECT PRODUCT1232.PNAME AS MAX_SELLING_PRODUCT,SUM(SALES1232.QTYSOLD) AS QUANTITY_SOLD ,SUM(SALES1232.QTYSOLD) *PRODUCT1232.PCOM AS TOTAL_COMMISSION FROM PR
2.PCODE=PRODUCT1232.PCODE GROUP BY SALES1232.PCODE ORDER BY QUANTITY_SOLD DESC LIMIT 1;
+---------------------+---------------+------------------+
| MAX_SELLING_PRODUCT | QUANTITY_SOLD | TOTAL_COMMISSION |
+---------------------+---------------+------------------+
| TINNED MUSHROOM     |           700 |           700000 |
+---------------------+---------------+------------------+
1 row in set (0.00 sec)
```

14. LIST THE TOTAL QUANTITY OF PRODUCT SOLD BY ABC CORPORATION.

select sum(sales1232.qtysold) as total_qt_sold_by_abc_corporation from sales_rep1232 join owns1232 on sales_rep1232.comname=owns1232.comname and sales_rep1232.comname='abc corporation' join sales1232 on sales_rep1232.repcode= sales1232.repcode and sales1232.pcode=owns1232.pcode;

```
mysql> SELECT SUM(SALES1232.QTYSOLD) AS TOTAL_QT_SOLD_BY_ABC_CORPORATION
    -> FROM SALES_REP1232 JOIN OWNS1232 ON
    -> SALES_REP1232.COMNAME=OWNS1232.COMNAME AND
    -> SALES_REP1232.COMNAME='ABC CORPORATION' JOIN SALES1232 ON SALES_REP1232.REPCODE= SALES1232.REPCODE AND SALES1232.PCODE=OWNS1232.PCODE;
+----------------------------------+
| TOTAL_QT_SOLD_BY_ABC_CORPORATION |
+----------------------------------+
|                              770 |
+----------------------------------+
1 row in set (0.00 sec)
```

15. LIST THE TOTAL SALE OF THAT PRODUCT WHICH IS HAVING MAXIMUM COMMISSION ON IT.

select product1232.pname as product_having_max_commission, sum(sales1232.qtysold) as total_sale from sales1232 join product1232 on sales1232.pcode=product1232.pcode where product1232.pcom in (select max(product1232.pcom) from product1232);

```
mysql> SELECT PRODUCT1232.PNAME AS PRODUCT_HAVING_MAX_COMMISSION,
    -> SUM(SALES1232.QTYSOLD) AS TOTAL_SALE FROM SALES1232 JOIN PRODUCT1232 ON SALES1232.PCODE=PRODUCT1232.PCODE WHERE PRODUCT1232.PCOM IN ( SELECT MAX(PRODUCT1232.
+------------------------------+------------+
| PRODUCT_HAVING_MAX_COMMISSION | TOTAL_SALE |
+------------------------------+------------+
| TINNED MUSHROOM              |        700 |
+------------------------------+------------+
1 row in set (0.00 sec)
```

16. LIST THE PRODUCT OF MAXIMUM SELLING PRODUCTS OF DGL FOOD PRODUCTS ALONG WITH ITS QTYSOLD AND REPRESENTATIVE CODE.

select p.pname,s.qtysold,s.repcode from sales1232 as s,sales_rep1232 as re,product1232 as p where p.pcode=s.pcode and s.repcode=re.repcode and re.comname='dgl food products' and s.pcode in(select pcode from (select pcode,sum(qtysold) as qs from sales1232 group by pcode order by pcode desc) as tmp having max(qs));

```
mysql> SELECT P.PNAME,S.QTYSOLD,S.REPCODE FROM SALES1232 AS
    -> S,SALES_REP1232 AS RE,PRODUCT1232 AS P WHERE
    -> P.PCODE=S.PCODE AND S.REPCODE=RE.REPCODE AND
    -> RE.COMNAME='DGL FOOD PRODUCTS' AND S.PCODE
    -> IN(SELECT PCODE FROM (SELECT PCODE,SUM(QTYSOLD) AS QS FROM SALES1232 GROUP BY PCODE order by pcode desc) AS TMP having max(qs));
+-----------------+---------+---------+
| PNAME           | QTYSOLD | REPCODE |
+-----------------+---------+---------+
| TINNED MUSHROOM |     200 |     102 |
| TINNED MUSHROOM |     500 |     103 |
+-----------------+---------+---------+
2 rows in set (0.02 sec)
```

17. LIST THE EARNING BY SELLING BABY FOOD.S

select sum(product1232.pcom*sales1232.qtysold)
as earning_by_selling_baby_food from product1232
join sales1232 on sales1232.pcode=product1232.pcode
and product1232.pname='baby food';

```
mysql> SELECT SUM(PRODUCT1232.PCOM*SALES1232.QTYSOLD)
    -> AS EARNING_BY_SELLING_BABY_FOOD FROM PRODUCT1232
    -> JOIN SALES1232 ON SALES1232.PCODE=PRODUCT1232.PCODE
    -> AND PRODUCT1232.PNAME='BABY FOOD';
+------------------------------+
| EARNING_BY_SELLING_BABY_FOOD |
+------------------------------+
|                         40.5 |
+------------------------------+
1 row in set (0.00 sec)
```