DATABASE ASSIGNMENT 6

54. create following tables and solve following questions(primary keys are marked in yellow)

foreign keys are marked in green

product(pid,pname,price,qty,cid,sid)

salesman (sid,sname,address)category

category(cid,cnam,descritpion)

```
mysql> select * from category;
+------+---------+-------------+
| cid  | cname   | description |
+------+---------+-------------+
|   10 | chips   | very crispy |
|   20 | biscuit | very cunchy |
|   30 | snacks  | yummy       |
+------+---------+-------------+
3 rows in set (0.00 sec)

mysql> select * from salesman;
+------+---------+---------+
| sid  | sname   | address |
+------+---------+---------+
| 1000 | rajesh  | pune    |
| 1001 | ajinkya | mumbai  |
| 1002 | ashish  | delhi   |
+------+---------+---------+
3 rows in set (0.00 sec)

mysql> select * from product ;
+------+----------+------+--------+------+------+
| pid  | pname    | qty  | price  | cid  | sid  |
+------+----------+------+--------+------+------+
|    1 | lays     |   30 |  50.00 |   10 | 1001 |
|    2 | 50-50    |   34 |  30.00 |   20 | 1001 |
|    3 | nice     |   56 |  70.00 |   20 | 1000 |
|    4 | pringles |   47 | 100.00 |   10 | 1000 |
+------+----------+------+--------+------+------+
4 rows in set (0.00 sec)
```

1. list all product name, their category name and name of a person, who sold that product (join)

```
mysql> select pname,p.cid,cname,p.sid,sname from
    -> product p inner join category c on c.cid = p.cid
    -> inner join salesman s on s.sid = p.sid;
+-----------+------+---------+------+---------+
| pname     | cid  | cname   | sid  | sname   |
+-----------+------+---------+------+---------+
| nice      |   20 | biscuit | 1000 | rajesh  |
| pringles  |   10 | chips   | 1000 | rajesh  |
| lays      |   10 | chips   | 1001 | ajinkya |
| 50-50     |   20 | biscuit | 1001 | ajinkya |
+-----------+------+---------+------+---------+
```

2. list all product name and salesman name for all salesman who stays in pune

```
mysql> SELECT pname ,sname ,s.address from
    -> product p inner join salesman s on s.sid= p.sid
    -> where s.address='pune';
+-----------+--------+---------+
| pname     | sname  | address |
+-----------+--------+---------+
| nice      | rajesh | pune    |
| pringles  | rajesh | pune    |
+-----------+--------+---------+
2 rows in set (0.00 sec)
```

55. create following tables and solve following questions(primary keys are marked in yellow)

foreign keys are marked in green

faculty(fid,fname,sp.skill1,sp.skill2)

courses(cid,cname,rid,fid)

room(roomid,rname,rloc)

faculty

fid fname spskill1 spskill2

10 kjzhcjhz a b

11 sdd x z

12 lksjk a x

13 ksdjlkj a b

courses

cid cname rid fid

100 jasmin 1st floor

131 DAC 101

141 DTISS

151 DIOT 105 12

Room

roomid rname rloc

100 jasmin 1st floor

101 Rose 2nd floor

105 Lotus 1st floor

103 Mogra 1st floor

```
mysql> select * from faculty;
+-----+----------+----------+
| fid | fname    | skill    |
+-----+----------+----------+
|  10 | NARENDRA | DATABASE |
|  11 | SONALI   | JAVA     |
|  12 | SARIKA   | .NET     |
|  13 | PAWAR    | null     |
+-----+----------+----------+
4 rows in set (0.00 sec)

mysql> select * from room;
+-----+--------+-----------+
| rid | rname  | rfloor    |
+-----+--------+-----------+
| 100 | jasmin | 1st_floor |
| 101 | rose   | 2nd_floor |
| 102 | Lotus  | 3rd_floor |
| 103 | mogra  | 4th_floor |
+-----+--------+-----------+
4 rows in set (0.00 sec)

mysql> select * from coures;
+-----+--------+-------------+------+------+
| cid | cname  | description | rid  | fid  |
+-----+--------+-------------+------+------+
| 131 | DAC    | JAVA        |  101 |   11 |
| 141 | DBDA   | DATABASE    |  100 |   10 |
| 151 | DITIIS | .NET        | NULL | NULL |
+-----+--------+-------------+------+------+
3 rows in set (0.00 sec)
```

1. list all courses for which no room is assigned and all rooms for which are available

```
mysql> select * from coures c where not exists
    -> ( select rname from room r where r.rid=c.rid);
+-----+--------+-------------+------+------+
| cid | cname  | description | rid  | fid  |
+-----+--------+-------------+------+------+
| 151 | DITIIS | .NET        | NULL | NULL |
+-----+--------+-------------+------+------+
1 row in set (0.00 sec)
```

2. list all faculties who are not allocated to any course

```
mysql> select * from faculty f where not exists
    -> (select fid from coures c where c.fid=f.fid);
+-----+--------+-------+
| fid | fname  | skill |
+-----+--------+-------+
|  12 | SARIKA | .NET  |
|  13 | PAWAR  | null  |
+-----+--------+-------+
2 rows in set (0.00 sec)
```

3. list all rooms which are allocated to any courses

```
RROR 1054 (42S22): Unknown column 'r.rid' in 'where
ysql> select * from room r where  exists
    -> (select rid from coures c where c.rid=r.rid);
-----+--------+-----------+
rid | rname   | rfloor    |
-----+--------+-----------+
100 | jasmin | 1st_floor |
101 | rose   | 2nd_floor |
-----+--------+-----------+
rows in set (0.00 sec)
```

4 list all rooms which are not allocated to any courses

```
ERROR 1054 (42S22): Unknown column 'r.rid' in 'where cla
mysql> select * from room r where not exists
    -> (select rid from coures c where c.rid=r.rid);
+-----+--------+-----------+
| rid | rname  | rfloor    |
+-----+--------+-----------+
| 102 | Lotus  | 3rd_floor |
| 103 | mogra  | 4th_floor |
+-----+--------+-----------+
2 rows in set (0.00 sec)
```

4. display courses and faculty assigned to those courses whose special skill is database

```
    -> and skill='DATABASE';
+-----+----------+----------+
| fid | fname    | skill    |
+-----+----------+----------+
|  10 | NARENDRA | DATABASE |
+-----+----------+----------+
1 row in set (0.00 sec)
```

6. display time table --- it should contain course details , faculty and room details

56. create following tables with given constraints

product---- qty >0, default 20.00,pname not null and unique

prodid pname qty price catid sid

123 lays 30 30.00 1 12

111 pepsi 40 50.00 4 11

134 nachos 50 50.00 1 12

124 dairy milk 40 60.00 2 14

124 pringles 40 60.00 1 14

saleman ----- sname -----not null

sid sname city

11 Rahul Pune

12 Kirti Mumbai

13 Prasad Nashik

14 Arnav Amaravati

category ---- cname unique and not null

cid cname description

1 chips very crunchy

2 chocolate very chocolaty

3 snacks yummy

4 cold drinks thanda thanda cool cool

```
mysql> select * from categ;
+-----+-------------+-------------------------+
| cid | cname       | description             |
+-----+-------------+-------------------------+
|   1 | chips       | very crunchy            |
|   2 | chocolate   | very chocolaty          |
|   3 | snacks      | yummy                   |
|   4 | cold drinks | thanda thanda cool cool |
+-----+-------------+-------------------------+
4 rows in set (0.00 sec)

mysql> select * from sm;
+-----+--------+-----------+--------------+
| sid | sname  | address   | credit_limit |
+-----+--------+-----------+--------------+
|  11 | Rahul  | Pune      |         NULL |
|  12 | Kirti  | Mumbai    |         NULL |
|  13 | Prasad | Nashik    |         NULL |
|  14 | Arnav  | Amaravati |         NULL |
+-----+--------+-----------+--------------+
4 rows in set (0.00 sec)

mysql> select * from pduct;
+-----+------------+-----+-------+------+-----+
| pid | pname      | qty | price | cid  | sid |
+-----+------------+-----+-------+------+-----+
| 111 | pepsi      |  40 | 50.00 |    4 |  11 |
| 122 | maggi      |  50 | 80.00 | NULL |  12 |
| 123 | lays       |  30 | 30.00 |    1 |  12 |
| 124 | pringles   |  40 | 60.00 |    1 |  14 |
| 125 | dairy milk |  40 | 60.00 |    2 |  14 |
| 134 | nachos     |  50 | 50.00 |    1 |  12 |
+-----+------------+-----+-------+------+-----+
6 rows in set (0.00 sec)
```

1. List all products with category chips

```
mysql> select * from pduct where cid=
    -> (select cid from categ where cname='chips');
+-----+----------+------+--------+------+------+
| pid | pname    | qty  | price  | cid  | sid  |
+-----+----------+------+--------+------+------+
| 123 | lays     |   30 | 30.00  |    1 |   12 |
| 124 | pringles |   40 | 60.00  |    1 |   14 |
| 134 | nachos   |   50 | 50.00  |    1 |   12 |
+-----+----------+------+--------+------+------+
3 rows in set (0.00 sec)

mysql>
```

2. display all products sold by kirti

```
mysql> select * from pduct where sid=
    -> (select sid from sm where sname='kirti');
+-----+--------+------+--------+------+------+
| pid | pname  | qty  | price  | cid  | sid  |
+-----+--------+------+--------+------+------+
| 123 | lays   |   30 | 30.00  |    1 |   12 |
| 134 | nachos |   50 | 50.00  |    1 |   12 |
+-----+--------+------+--------+------+------+
2 rows in set (0.00 sec)
```

3. display all salesman who do not sold any product

```
mysql> select * from sm s where not exists
    -> (select sid from pduct p where s.sid = p.sid);
+-----+--------+---------+
| sid | sname  | address |
+-----+--------+---------+
|  13 | Prasad | Nashik  |
+-----+--------+---------+
1 row in set (0.00 sec)
```

4. display all category for which no product is there

```
ERROR 1054 (42S22): Unknown column 'c.cid' in 'where c
mysql> select * from categ c where not exists
    -> (select cid from pduct p where p.cid=c.cid);
+-----+--------+-------------+
| cid | cname  | description |
+-----+--------+-------------+
|   3 | snacks | yummy       |
+-----+--------+-------------+
1 row in set (0.00 sec)
```

5. display all products with no category assigned

```
mysql> select * from pduct p where not exists
    -> (select cid from categ c where c.cid=p.cid);
+-----+--------+------+-------+------+------+
| pid | pname  | qty  | price | cid  | sid  |
+-----+--------+------+-------+------+------+
| 122 | maggi  |   50 | 80.00 | NULL |   12 |
+-----+--------+------+-------+------+------+
1 row in set (0.00 sec)
```

6. list all salesman who stays in city with name starts with P or N

```
mysql> select * from sm where address regexp '^[pn].*$';
+-----+--------+---------+
| sid | sname  | address |
+-----+--------+---------+
|  11 | Rahul  | Pune    |
|  13 | Prasad | Nashik  |
+-----+--------+---------+
2 rows in set (0.00 sec)
```

7. add new column in salesman table by name credit limit

```
mysql> select * from sm;
+-----+--------+-----------+--------------+
| sid | sname  | address   | credit_limit |
+-----+--------+-----------+--------------+
|  11 | Rahul  | Pune      |         NULL |
|  12 | Kirti  | Mumbai    |         NULL |
|  13 | Prasad | Nashik    |         NULL |
|  14 | Arnav  | Amaravati |         NULL |
+-----+--------+-----------+--------------+
4 rows in set (0.00 sec)
```

player (player_id, pname,speciality,date_of joining,num_matches,team_id)

team(team_id, tname,player_num)

matches(match_id, team1_id,team2_id,match_date,winner,man_of_the match)

simple query

1. display all players playerid, player name and experience

```
ERROR 1054 (42S22): Unknown column 'pid' in 'field list'
mysql> select pid ,pname , floor(datediff(curdate(),doj)/365) experience from player;
+-----+--------+------------+
| pid | pname  | experience |
+-----+--------+------------+
|   7 | MSD    |         20 |
|   8 | Hardik |         17 |
|  18 | vk     |         16 |
|  19 | kartik |         15 |
+-----+--------+------------+
4 rows in set (0.00 sec)
```

2. display all player with experience > 5 years (15 years)

```
mysql> select pid ,pname , floor(datediff(curdate(),doj)/365) experience from player having experience>15;
+-----+--------+------------+
| pid | pname  | experience |
+-----+--------+------------+
|   7 | MSD    |         20 |
|   8 | Hardik |         17 |
|  18 | vk     |         16 |
+-----+--------+------------+
3 rows in set (0.00 sec)
```

3. display all players joined in march month, any year (january)

```
mysql> select pname ,monthname(doj) from player where monthname(doj)='january';
+--------+----------------+
| pname  | monthname(doj) |
+--------+----------------+
| MSD    | January        |
| vk     | January        |
+--------+----------------+
2 rows in set (0.00 sec)
```

4. display all players joined in march 1995(august 2008)

```
mysql> select pid,pname from player where month(doj)=10 and year(doj)=2008;
+-----+--------+
| pid | pname  |
+-----+--------+
|  19 | kartik |
+-----+--------+
1 row in set (0.00 sec)
```

5. display all player with number of matches played
   are either 5 or 10 or 8 (289,199,189)

```
mysql> select pname from player where num_of_matches in(199,189,289);
+--------+
| pname  |
+--------+
| MSD    |
| Hardik |
| vk     |
| kartik |
+--------+
```

6. display all players who are either batsman, bowler

```
mysql> select pid, pname from player where speciality in ('batsman','bowler');
+-----+--------+
| pid | pname  |
+-----+--------+
|  18 | vk     |
|  19 | kartik |
+-----+--------+
2 rows in set (0.00 sec)
```

7. display all employees who joined in year 1995 or
   1996 or 1997

```
mysql> select pid, pname,year(doj) from player where year(doj) in (2004,2008);
+-----+--------+-----------+
| pid | pname  | year(doj) |
+-----+--------+-----------+
|   7 | MSD    |      2004 |
|  18 | vk     |      2008 |
|  19 | kartik |      2008 |
+-----+--------+-----------+
3 rows in set (0.00 sec)
```