**Name :Vishal singh**

**Subject:DBMS**

**PRN:1132220536**

**SLIP\_3.**

MariaDB [slip\_3]> create table owner(o\_name varchar(10) primary key,address varchar(10),phone bigint);

Query OK, 0 rows affected (0.475 sec)

MariaDB [slip\_3]> create table district(d\_code int primary key check(d\_code>0),d\_name varchar(10),tax\_rate decimal(5,2));

Query OK, 0 rows affected (0.468 sec)

MariaDB [slip\_3]> create table property(p\_nos int primary key check(p\_nos>0),description varchar(10),area varchar(10),d\_code int,o\_name varchar(10),foreign key(d\_code) references district(d\_code),foreign key(o\_name) references owner(o\_name));

Query OK, 0 rows affected (0.530 sec)

MariaDB [slip\_3]> desc property;

+-------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+-------------+------+-----+---------+-------+

| p\_nos | int(11) | NO | PRI | NULL | |

| description | varchar(10) | YES | | NULL | |

| area | varchar(10) | YES | | NULL | |

| d\_code | int(11) | YES | MUL | NULL | |

| o\_name | varchar(10) | YES | MUL | NULL | |

+-------------+-------------+------+-----+---------+-------+

5 rows in set (0.070 sec)

MariaDB [slip\_3]> desc owner;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| o\_name | varchar(10) | NO | PRI | NULL | |

| address | varchar(10) | YES | | NULL | |

| phone | bigint(20) | YES | | NULL | |

+---------+-------------+------+-----+---------+-------+

3 rows in set (0.015 sec)

MariaDB [slip\_3]> desc district;

+----------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------+--------------+------+-----+---------+-------+

| d\_code | int(11) | NO | PRI | NULL | |

| d\_name | varchar(10) | YES | | NULL | |

| tax\_rate | decimal(5,2) | YES | | NULL | |

+----------+--------------+------+-----+---------+-------+

3 rows in set (0.014 sec)

MariaDB [slip\_3]> insert into owner values('vishal','pune',7875487500);

Query OK, 1 row affected (0.108 sec)

MariaDB [slip\_3]> insert into owner values('sudh','patna,8080145708);

MariaDB [slip\_3]> insert into owner values('sudh','patna',8080145708);

Query OK, 1 row affected (0.108 sec)

MariaDB [slip\_3]> insert into owner values('dev','goa',8080145700);

Query OK, 1 row affected (0.055 sec)

MariaDB [slip\_3]> select \* from owner;

+--------+---------+------------+

| o\_name | address | phone |

+--------+---------+------------+

| dev | goa | 8080145700 |

| sudh | patna | 8080145708 |

| vishal | pune | 7875487500 |

+--------+---------+------------+

3 rows in set (0.102 sec)

MariaDB [slip\_3]> desc district;

+----------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------+--------------+------+-----+---------+-------+

| d\_code | int(11) | NO | PRI | NULL | |

| d\_name | varchar(10) | YES | | NULL | |

| tax\_rate | decimal(5,2) | YES | | NULL | |

+----------+--------------+------+-----+---------+-------+

3 rows in set (0.015 sec)

MariaDB [slip\_3]> select \* from owner;

+--------+---------+------------+

| o\_name | address | phone |

+--------+---------+------------+

| 1001 | sangli | 0 |

| 1002 | patna | 0 |

| 1003 | danapur | 0 |

| dev | goa | 8080145700 |

| sudh | patna | 8080145708 |

| vishal | pune | 7875487500 |

+--------+---------+------------+

6 rows in set (0.000 sec)

MariaDB [slip\_3]> select \* from owner;

+--------+---------+------------+

| o\_name | address | phone |

+--------+---------+------------+

| dev | goa | 8080145700 |

| sudh | patna | 8080145708 |

| vishal | pune | 7875487500 |

+--------+---------+------------+

3 rows in set (0.001 sec)

MariaDB [slip\_3]> select \* from district;

Empty set (0.000 sec)

MariaDB [slip\_3]> desc district;

+----------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------+--------------+------+-----+---------+-------+

| d\_code | int(11) | NO | PRI | NULL | |

| d\_name | varchar(10) | YES | | NULL | |

| tax\_rate | decimal(5,2) | YES | | NULL | |

+----------+--------------+------+-----+---------+-------+

3 rows in set (0.013 sec)

MariaDB [slip\_3]> insert into district values(1001,'patna',0.15);

Query OK, 1 row affected (0.114 sec)

MariaDB [slip\_3]> insert into district values(1002,'sangli',0.25);

Query OK, 1 row affected (0.049 sec)

MariaDB [slip\_3]> insert into district values(1003,'danapur',0.15);

Query OK, 1 row affected (0.113 sec)

MariaDB [slip\_3]> select \* from district;

+--------+---------+----------+

| d\_code | d\_name | tax\_rate |

+--------+---------+----------+

| 1001 | patna | 0.15 |

| 1002 | sangli | 0.25 |

| 1003 | danapur | 0.15 |

+--------+---------+----------+

3 rows in set (0.000 sec)

MariaDB [slip\_3]> select \* from owner;

+--------+---------+------------+

| o\_name | address | phone |

+--------+---------+------------+

| dev | goa | 8080145700 |

| sudh | patna | 8080145708 |

| vishal | pune | 7875487500 |

+--------+---------+------------+

3 rows in set (0.001 sec)

MariaDB [slip\_3]> desc property;

+-------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+-------------+------+-----+---------+-------+

| p\_nos | int(11) | NO | PRI | NULL | |

| description | varchar(10) | YES | | NULL | |

| area | varchar(10) | YES | | NULL | |

| d\_code | int(11) | YES | MUL | NULL | |

| o\_name | varchar(10) | YES | MUL | NULL | |

+-------------+-------------+------+-----+---------+-------+

5 rows in set (0.014 sec)

MariaDB [slip\_3]> insert into property values(5001,'aaa','rural',1001,'vishal');

Query OK, 1 row affected (0.065 sec)

MariaDB [slip\_3]> insert into property values(5002,'bbb','rural',1002,'dev');

Query OK, 1 row affected (0.143 sec)

MariaDB [slip\_3]> insert into property values(5003,'ccc','urban',1003,'sudh');

Query OK, 1 row affected (0.111 sec)

MariaDB [slip\_3]> insert into property values(5004,'ddd','urban',1002,'vishal');

Query OK, 1 row affected (0.050 sec)

MariaDB [slip\_3]> select \* from property ;

+-------+-------------+-------+--------+--------+

| p\_nos | description | area | d\_code | o\_name |

+-------+-------------+-------+--------+--------+

| 5001 | aaa | rural | 1001 | vishal |

| 5002 | bbb | rural | 1002 | dev |

| 5003 | ccc | urban | 1003 | sudh |

| 5004 | ddd | urban | 1002 | vishal |

+-------+-------------+-------+--------+--------+

4 rows in set (0.001 sec)

MariaDB [slip\_3]> select \* from owner;

+--------+---------+------------+

| o\_name | address | phone |

+--------+---------+------------+

| dev | goa | 8080145700 |

| sudh | patna | 8080145708 |

| vishal | pune | 7875487500 |

+--------+---------+------------+

3 rows in set (0.000 sec)

MariaDB [slip\_3]> select \* from district;

+--------+---------+----------+

| d\_code | d\_name | tax\_rate |

+--------+---------+----------+

| 1001 | patna | 0.15 |

| 1002 | sangli | 0.25 |

| 1003 | danapur | 0.15 |

+--------+---------+----------+

3 rows in set (0.000 sec)

MariaDB [slip\_3]> select property.o\_name,description,d\_name from property,owner,district where owner.o\_name=property.o\_name;

+--------+-------------+---------+

| o\_name | description | d\_name |

+--------+-------------+---------+

| vishal | aaa | patna |

| vishal | aaa | sangli |

| vishal | aaa | danapur |

| dev | bbb | patna |

| dev | bbb | sangli |

| dev | bbb | danapur |

| sudh | ccc | patna |

| sudh | ccc | sangli |

| sudh | ccc | danapur |

| vishal | ddd | patna |

| vishal | ddd | sangli |

| vishal | ddd | danapur |

+--------+-------------+---------+

12 rows in set (0.060 sec)

MariaDB [slip\_3]> select distinct property.o\_name,description,d\_name from property,owner,district where owner.o\_name=property.o\_name;

+--------+-------------+---------+

| o\_name | description | d\_name |

+--------+-------------+---------+

| vishal | aaa | patna |

| vishal | aaa | sangli |

| vishal | aaa | danapur |

| dev | bbb | patna |

| dev | bbb | sangli |

| dev | bbb | danapur |

| sudh | ccc | patna |

| sudh | ccc | sangli |

| sudh | ccc | danapur |

| vishal | ddd | patna |

| vishal | ddd | sangli |

| vishal | ddd | danapur |

+--------+-------------+---------+

12 rows in set (0.001 sec)

MariaDB [slip\_3]> select distinct property.o\_name,description,d\_name from property,owner,district where owner.o\_name=property.o\_name group by o\_name ;

+--------+-------------+--------+

| o\_name | description | d\_name |

+--------+-------------+--------+

| dev | bbb | patna |

| sudh | ccc | patna |

| vishal | aaa | patna |

+--------+-------------+--------+

3 rows in set (0.031 sec)

MariaDB [slip\_3]> select distinct property.o\_name,description,d\_name from property,owner,district where owner.o\_name=property.o\_name order by o\_name ;

+--------+-------------+---------+

| o\_name | description | d\_name |

+--------+-------------+---------+

| dev | bbb | patna |

| dev | bbb | danapur |

| dev | bbb | sangli |

| sudh | ccc | sangli |

| sudh | ccc | patna |

| sudh | ccc | danapur |

| vishal | aaa | sangli |

| vishal | ddd | patna |

| vishal | ddd | danapur |

| vishal | aaa | patna |

| vishal | aaa | danapur |

| vishal | ddd | sangli |

+--------+-------------+---------+

12 rows in set (0.001 sec)

MariaDB [slip\_3]> select \* from district;

+--------+---------+----------+

| d\_code | d\_name | tax\_rate |

+--------+---------+----------+

| 1001 | patna | 0.15 |

| 1002 | sangli | 0.25 |

| 1003 | danapur | 0.15 |

+--------+---------+----------+

3 rows in set (0.001 sec)

MariaDB [slip\_3]> select \* from property ;

+-------+-------------+-------+--------+--------+

| p\_nos | description | area | d\_code | o\_name |

+-------+-------------+-------+--------+--------+

| 5001 | aaa | rural | 1001 | vishal |

| 5002 | bbb | rural | 1002 | dev |

| 5003 | ccc | urban | 1003 | sudh |

| 5004 | ddd | urban | 1002 | vishal |

+-------+-------------+-------+--------+--------+

4 rows in set (0.000 sec)

MariaDB [slip\_3]> select \* from owner;

+--------+---------+------------+

| o\_name | address | phone |

+--------+---------+------------+

| dev | goa | 8080145700 |

| sudh | patna | 8080145708 |

| vishal | pune | 7875487500 |

+--------+---------+------------+

3 rows in set (0.000 sec)

MariaDB [slip\_3]> update district set d\_name='nashik' where d\_name='danapur';

Query OK, 1 row affected (0.088 sec)

Rows matched: 1 Changed: 1 Warnings: 0

MariaDB [slip\_3]> select \* from district;

+--------+--------+----------+

| d\_code | d\_name | tax\_rate |

+--------+--------+----------+

| 1001 | patna | 0.15 |

| 1002 | sangli | 0.25 |

| 1003 | nashik | 0.15 |

+--------+--------+----------+

3 rows in set (0.000 sec)

MariaDB [slip\_3]> select \* from owner;

+--------+---------+------------+

| o\_name | address | phone |

+--------+---------+------------+

| dev | goa | 8080145700 |

| sudh | patna | 8080145708 |

| vishal | pune | 7875487500 |

+--------+---------+------------+

3 rows in set (0.001 sec)

MariaDB [slip\_3]> select \* from property ;

+-------+-------------+-------+--------+--------+

| p\_nos | description | area | d\_code | o\_name |

+-------+-------------+-------+--------+--------+

| 5001 | aaa | rural | 1001 | vishal |

| 5002 | bbb | rural | 1002 | dev |

| 5003 | ccc | urban | 1003 | sudh |

| 5004 | ddd | urban | 1002 | vishal |

+-------+-------------+-------+--------+--------+

4 rows in set (0.001 sec)

MariaDB [slip\_3]> select \* from property,district where property.d\_code=district.d\_code and d\_name='nashik';

+-------+-------------+-------+--------+--------+--------+--------+----------+

| p\_nos | description | area | d\_code | o\_name | d\_code | d\_name | tax\_rate |

+-------+-------------+-------+--------+--------+--------+--------+----------+

| 5003 | ccc | urban | 1003 | sudh | 1003 | nashik | 0.15 |

+-------+-------------+-------+--------+--------+--------+--------+----------+

1 row in set (0.085 sec)

MariaDB [slip\_3]> select count(\*) from district,property where property.d\_code=district.d\_code and o\_name='dev' and district.d\_name='sangli';

+----------+

| count(\*) |

+----------+

| 1 |

+----------+

1 row in set (0.061 sec)

MariaDB [slip\_3]> select d\_name,owner.o\_name,area,tax\_rate from district,owner,property where district.d\_code=property.d\_code and owner.o\_name=property.o\_name group by o\_name;

+--------+--------+-------+----------+

| d\_name | o\_name | area | tax\_rate |

+--------+--------+-------+----------+

| sangli | dev | rural | 0.25 |

| nashik | sudh | urban | 0.15 |

| patna | vishal | rural | 0.15 |

+--------+--------+-------+----------+

3 rows in set (0.001 sec)

MariaDB [slip\_3]> select d\_name,owner.o\_name,area,tax\_rate from district,owner,property where district.d\_code=property.d\_code and owner.o\_name=property.o\_name group by o\_name;

+--------+--------+-------+----------+

| d\_name | o\_name | area | tax\_rate |

+--------+--------+-------+----------+

| sangli | dev | rural | 0.25 |

| nashik | sudh | urban | 0.15 |

| patna | vishal | rural | 0.15 |

+--------+--------+-------+----------+

3 rows in set (0.033 sec)

MariaDB [slip\_3]> select d\_name,owner.o\_name,area,tax\_rate from district,owner,property where district.d\_code=property.d\_code ;

+--------+--------+-------+----------+

| d\_name | o\_name | area | tax\_rate |

+--------+--------+-------+----------+

| patna | dev | rural | 0.15 |

| patna | sudh | rural | 0.15 |

| patna | vishal | rural | 0.15 |

| sangli | dev | rural | 0.25 |

| sangli | sudh | rural | 0.25 |

| sangli | vishal | rural | 0.25 |

| nashik | dev | urban | 0.15 |

| nashik | sudh | urban | 0.15 |

| nashik | vishal | urban | 0.15 |

| sangli | dev | urban | 0.25 |

| sangli | sudh | urban | 0.25 |

| sangli | vishal | urban | 0.25 |

+--------+--------+-------+----------+

12 rows in set (0.001 sec)

MariaDB [slip\_3]> select d\_name,owner.o\_name,area,tax\_rate from district,owner,property where owner.o\_name=property.o\_name group by o\_name;

+--------+--------+-------+----------+

| d\_name | o\_name | area | tax\_rate |

+--------+--------+-------+----------+

| patna | dev | rural | 0.15 |

| patna | sudh | urban | 0.15 |

| patna | vishal | rural | 0.15 |

+--------+--------+-------+----------+

3 rows in set (0.001 sec)

MariaDB [slip\_3]> select d\_name,owner.o\_name,area,tax\_rate from district,owner,property where district.d\_code=property.d\_code and owner.o\_name=property.o\_name group by o\_name;

+--------+--------+-------+----------+

| d\_name | o\_name | area | tax\_rate |

+--------+--------+-------+----------+

| sangli | dev | rural | 0.25 |

| nashik | sudh | urban | 0.15 |

| patna | vishal | rural | 0.15 |

+--------+--------+-------+----------+

3 rows in set (0.001 sec)

MariaDB [slip\_3]> select d\_name,owner.o\_name,area,tax\_rate from district,owner,property where district.d\_code=property.d\_code and owner.o\_name=property.o\_name order by o\_name;

+--------+--------+-------+----------+

| d\_name | o\_name | area | tax\_rate |

+--------+--------+-------+----------+

| sangli | dev | rural | 0.25 |

| nashik | sudh | urban | 0.15 |

| patna | vishal | rural | 0.15 |

| sangli | vishal | urban | 0.25 |

+--------+--------+-------+----------+

4 rows in set (0.001 sec)