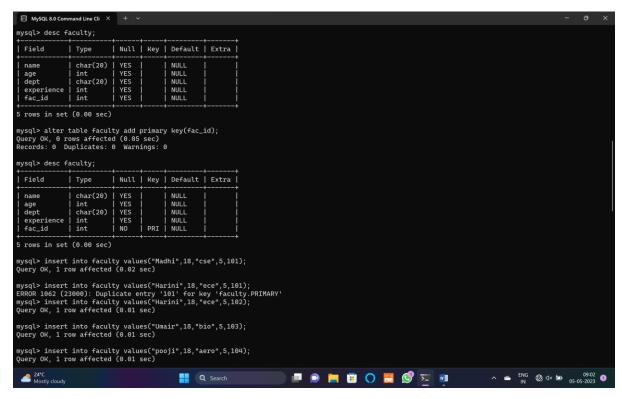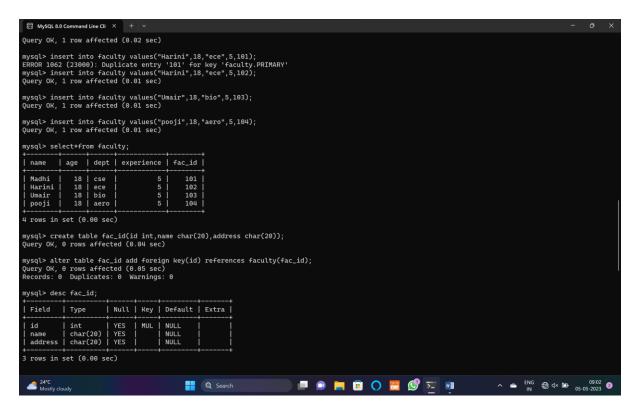# Database management system

P.Madeena

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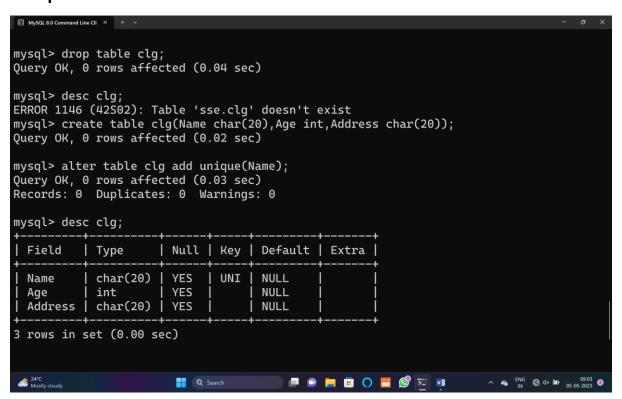
Primary key:

Foreign key:

```
Query OK, 1 row affected (0.02 sec)

mysql> insert into faculty values("Harini",18,"ece",5,101);
ERROR 1062 (23000): Duplicate entry '101' for key 'faculty.PRIMARY'
mysql> insert into faculty values("Harini",18,"ece",5,102);
Query OK, 1 row affected (0.01 sec)

mysql> insert into faculty values("Umair",18,"bio",5,103);
Query OK, 1 row affected (0.01 sec)

mysql> insert into faculty values("pooji",18,"aero",5,104);
Query OK, 1 row affected (0.01 sec)

mysql> select*from faculty;
+--------+------+------+------------+--------+
| name   | age  | dept | experience | fac_id |
+--------+------+------+------------+--------+
| Madhi  |   18 | cse  |          5 |    101 |
| Harini |   18 | ece  |          5 |    102 |
| Umair  |   18 | bio  |          5 |    103 |
| pooji  |   18 | aero |          5 |    104 |
+--------+------+------+------------+--------+
4 rows in set (0.00 sec)

mysql> create table fac_id(id int,name char(20),address char(20));
Query OK, 0 rows affected (0.04 sec)

mysql> alter table fac_id add foreign key(id) references faculty(fac_id);
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc fac_id;
+---------+----------+------+-----+---------+-------+
| Field   | Type     | Null | Key | Default | Extra |
+---------+----------+------+-----+---------+-------+
| id      | int      | YES  | MUL | NULL    |       |
| name    | char(20) | YES  |     | NULL    |       |
| address | char(20) | YES  |     | NULL    |       |
+---------+----------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

Unique:


```
mysql> drop table clg;
Query OK, 0 rows affected (0.04 sec)

mysql> desc clg;
ERROR 1146 (42S02): Table 'sse.clg' doesn't exist
mysql> create table clg(Name char(20),Age int,Address char(20));
Query OK, 0 rows affected (0.02 sec)

mysql> alter table clg add unique(Name);
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc clg;
+---------+----------+------+-----+---------+-------+
| Field   | Type     | Null | Key | Default | Extra |
+---------+----------+------+-----+---------+-------+
| Name    | char(20) | YES  | UNI | NULL    |       |
| Age     | int      | YES  |     | NULL    |       |
| Address | char(20) | YES  |     | NULL    |       |
+---------+----------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

Check:

```
No query specified

mysql> alter table faculty add check(dept="ece");
ERROR 3819 (HY000): Check constraint 'faculty_chk_1' is violated.
mysql> alter table faculty add check(age<20);
Query OK, 4 rows affected (0.04 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select*from faculty;
+---------+-------+-------+-------------+---------+
| name    | age   | dept  | experience  | fac_id  |
+---------+-------+-------+-------------+---------+
| Madhi   |    18 | cse   |           5 |     101 |
| Harini  |    18 | ece   |           5 |     102 |
| Umair   |    18 | bio   |           5 |     103 |
| pooji   |    18 | aero  |           5 |     104 |
+---------+-------+-------+-------------+---------+
4 rows in set (0.00 sec)

mysql> update faculty set age=25 where name="Harini";
```