

## EXPERIMENT NO 2

## DDL COMMANDS -PRIMARY, FOREIGN KEY, UNIQUE, CHECK

### PRIMARY KEY

```
MySQL 8.0 Command Line Client - Unicode
profile
students
-----
11 rows in set (0.06 sec)

mysql> create table faculty(name char(20),age int,dpt char(10),mobilen no int);
Query OK, 0 rows affected (0.06 sec)

mysql> desc faculty;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name  | char(20) | YES |     | NULL    |       |
| age   | int     | YES |     | NULL    |       |
| dpt   | char(10) | YES |     | NULL    |       |
| mobilen no | int     | YES |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.03 sec)

mysql> alter table faculty
-> add primary key(primary key id);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'primary key id' at line 2
mysql> add primary key(primary key_id);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'add primary key(primary key_id)' at line 1
mysql> add primary key(primary key_id int);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'add primary key(primary key_id int)' at line 1
mysql> alter table faculty add primary key(name);
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc faculty;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name  | char(20) | NO   | PRI | NULL    |       |
| age   | int     | YES  |     | NULL    |       |
| dpt   | char(10) | YES  |     | NULL    |       |
| mobilen no | int     | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> alter table faculty add id int;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc faculty;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name  | char(20) | NO   | PRI | NULL    |       |
| age   | int     | YES  |     | NULL    |       |
| dpt   | char(10) | YES  |     | NULL    |       |
| mobilen no | int     | YES  |     | NULL    |       |
| id     | int     | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

### FOREIGN KEY

```
MySQL 8.0 Command Line Client - Unicode

mysql> create table dept(deptno int,courses char(20),deptheadname char(25));
Query OK, 0 rows affected (0.04 sec)

mysql> desc dept;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| deptno | int | YES |     | NULL    |       |
| courses | char(20) | YES |     | NULL    |       |
| deptheadname | char(25) | YES |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> alter table faculty add primary key(deptno);
ERROR 1068 (42000): Multiple primary key defined
mysql> alter table dept add primary key(deptno);
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc dept;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| deptno | int | NO   | PRI | NULL    |       |
| courses | char(20) | YES |     | NULL    |       |
| deptheadname | char(25) | YES |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> alter table faculty add foreign key(deptno) references dept(deptno);
ERROR 1072 (42000): Key column 'deptno' doesn't exist in table
mysql> alter table faculty add foreign key(dpno) references dept(deptno);
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc faculty;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name  | char(20) | NO   | PRI | NULL    |       |
| age   | int     | YES  |     | NULL    |       |
| dpt   | char(10) | YES  |     | NULL    |       |
| mobilen no | int     | YES  |     | NULL    |       |
| id     | int     | YES  |     | NULL    |       |
| dpno   | int     | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

# UNIQUE KEY

```
MySQL 8.0 Command Line Client - Unicode
+----+-----+-----+-----+-----+
| age | int | YES | | NULL |
| dpt | char(10) | YES | | NULL |
| mobileno | int | YES | | NULL |
| id | int | YES | | NULL |
| dptno | int | YES | MUL | NULL |
+----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> alter table faculty add unique(dpt);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc faculty;
+----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+
| name | char(20) | NO | PRI | NULL |
| age | int | YES | | NULL |
| dpt | char(10) | YES | UNI | NULL |
| mobileno | int | YES | | NULL |
| id | int | YES | | NULL |
| dptno | int | YES | MUL | NULL |
+----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> _
```

# CHECK

```
MySQL 8.0 Command Line Client - Unicode

mysql> alter table faculty add check(age<20);
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc faculty;
+----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+
| name | char(20) | NO | PRI | NULL |
| age | int | YES | | NULL |
| dpt | char(10) | YES | UNI | NULL |
| mobileno | int | YES | | NULL |
| id | int | YES | | NULL |
| dptno | int | YES | MUL | NULL |
+----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql>
```