



DBMS EXPERIMENT -3:

DDL Commands with Constraints – PRIMARY, FOREIGN KEY, UNIQUE, CHECK

Create a Table Employee with fields S_No, name, Designation Branch with primary key as S_No. Create a table Workers with the same fields and make the field S_No as foreign key.

OUTPUT:

```
MySQL 8.0 Command Line Client
ERROR 1146 (42502): Table 'employee.employee1' doesn't exist
mysql> desc employee1;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sno   | int  | NO   | PRI | NULL    |       |
| name  | char(20) | YES |     | NULL    |       |
| designation_branch | char(20) | YES |     | NULL    |       |
+-----+
3 rows in set (0.00 sec)

mysql> create table workers1
-> (sno int,
-> name char,
-> designation_branch char);
Query OK, 0 rows affected (0.02 sec)

mysql> alter table workers1
-> add constraint link
-> foreign key(sno)
-> references employee1(sno);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc workers1;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sno   | int  | YES  | MUL | NULL    |       |
| name  | char(1) | YES  |     | NULL    |       |
| designation_branch | char(1) | YES  |     | NULL    |       |
+-----+
3 rows in set (0.00 sec)

mysql> alter table employee1
-> add unique (name);
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee1;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sno   | int  | NO   | PRI | NULL    |       |
| name  | char(20) | YES  | UNI | NULL    |       |
| designation_branch | char(20) | YES  |     | NULL    |       |
+-----+
3 rows in set (0.00 sec)
```

```
MySQL 8.0 Command Line Client
Enter password: *****
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 18
Server version: 8.0.31 MySQL Community Server - GPL
Copyright (c) 2000, 2022, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database employee;
Query OK, 1 row affected (0.01 sec)

mysql> use employee;
Database changed
mysql> create table employee1(sno int(10),name char(20),designation_branch char(20));
Query OK, 0 rows affected, 1 warning (0.02 sec)

mysql> desc employee1;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sno   | int  | YES  |     | NULL    |       |
| name  | char(20) | YES  |     | NULL    |       |
| designation_branch | char(20) | YES  |     | NULL    |       |
+-----+
3 rows in set (0.00 sec)

mysql> alter table employee1
-> add primary key(sno);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee1
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sno   | int  | NO   | PRI | NULL    |       |
| name  | char(20) | YES  |     | NULL    |       |
+-----+
2 rows in set (0.00 sec)

ERROR 1146 (42502): Table 'employee.employee1' doesn't exist
mysql> desc employee1;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sno   | int  | NO   | PRI | NULL    |       |
| name  | char(20) | YES  |     | NULL    |       |
+-----+
2 rows in set (0.00 sec)
```

```
MySQL 8.0 Command Line Client

mysql> use employee;
Database changed
mysql> create table bank1
  -> (id int not null,
  -> age int,
  -> check (age>18));
Query OK, 0 rows affected (0.03 sec)

mysql> insert into bank1
  -> values
  -> (12,18)
  -> ;
Query OK, 1 row affected (0.01 sec)

mysql> select * from bank1;
+-----+
| id | age |
+-----+
| 12 | 18 |
+-----+
1 row in set (0.00 sec)

mysql>
```

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