

## Practical No.2: To perform SQL DDL commands

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### 1. Show Databases:

```
CA: Command Prompt - mysql -u root -p

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mayuri      |
| mysql       |
| online_store |
| performance_schema |
| school      |
| sys         |
+-----+
7 rows in set (0.14 sec)
```

### 2. Create Database:

```
mysql> create database Student;
Query OK, 1 row affected (0.17 sec)

mysql> use student;
Database changed
```

### 3. Create Table:

```
mysql> create table stud_Info(st_id int(2),st_name varchar(10),st_course varchar(10),st_marks int(4));
Query OK, 0 rows affected, 2 warnings (1.59 sec)
```

### 4. Describe Table:

```
mysql> desc stud_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| st_id      | int           | YES  |     | NULL    |       |
| st_name    | varchar(10)   | YES  |     | NULL    |       |
| st_course  | varchar(10)   | YES  |     | NULL    |       |
| st_marks   | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.23 sec)
```

## 5. Insert:

```
mysql> insert into stud_info values(10,"Mayuri","IT",100);
Query OK, 1 row affected (0.12 sec)

mysql> insert into stud_info values(11,"Rakhi","CO",30);
Query OK, 1 row affected (0.12 sec)

mysql> insert into stud_info values(12,"Manav","Mech",89);
Query OK, 1 row affected (0.17 sec)

mysql> insert into stud_info values(13,"Kunal","EXTC",100);
Query OK, 1 row affected (0.25 sec)

mysql> insert into stud_info values(14,"Heena","IT",96);
Query OK, 1 row affected (0.17 sec)
```

## 6. Select :

```
mysql> select * from stud_info;
+-----+-----+-----+-----+
| st_id | st_name | st_course | st_marks |
+-----+-----+-----+-----+
| 10    | Mayuri  | IT        | 100      |
| 11    | Rakhi   | CO        | 30       |
| 12    | Manav   | Mech      | 89       |
| 13    | Kunal   | EXTC      | 100      |
| 14    | Heena   | IT        | 96       |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

## 7. Alter –Add:

```
mysql> alter table stud_info add(roll_no int(6), st_addr varchar(20));
Query OK, 0 rows affected, 1 warning (2.11 sec)
Records: 0 Duplicates: 0 Warnings: 1

mysql> desc stud_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| st_id      | int           | YES  |     | NULL    |       |
| st_name    | varchar(10)   | YES  |     | NULL    |       |
| st_course  | varchar(10)   | YES  |     | NULL    |       |
| st_marks   | int           | YES  |     | NULL    |       |
| roll_no    | int           | YES  |     | NULL    |       |
| st_addr    | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.07 sec)
```

## 8. Alter – Modify:

```
mysql> alter table stud_info modify st_marks int(10) not null;
Query OK, 0 rows affected, 1 warning (2.43 sec)
Records: 0 Duplicates: 0 Warnings: 1

mysql> desc stud_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| st_id      | int           | NO   | PRI | NULL    |       |
| st_name    | varchar(10)   | YES  |     | NULL    |       |
| st_course  | varchar(10)   | YES  |     | NULL    |       |
| st_marks   | int           | NO   |     | NULL    |       |
| st_addr    | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.08 sec)
```

## 9. Alter – Drop:

```
mysql> alter table stud_info drop roll_no;
Query OK, 0 rows affected (2.35 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc stud_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| st_id      | int           | YES  |     | NULL    |       |
| st_name    | varchar(10)   | YES  |     | NULL    |       |
| st_course  | varchar(10)   | YES  |     | NULL    |       |
| st_marks   | int           | YES  |     | NULL    |       |
| st_addr    | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

## 10. Alter – Change:

```
mysql> alter table stud_info CHANGE st_addr st_addr int(10);
Query OK, 5 rows affected, 1 warning (2.28 sec)
Records: 5 Duplicates: 0 Warnings: 1

mysql> desc stud_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| st_id      | int           | NO   | PRI | NULL    |       |
| st_name    | varchar(10)   | YES  |     | NULL    |       |
| st_course  | varchar(10)   | YES  |     | NULL    |       |
| st_marks   | int           | NO   |     | NULL    |       |
| st_addr    | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.08 sec)
```

### 11. Alter – (Add Primary Key):

```
mysql> alter table stud_info add primary key(st_id);
Query OK, 0 rows affected (1.48 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc stud_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| st_id      | int       | NO   | PRI | NULL    |       |
| st_name    | varchar(10) | YES  |     | NULL    |       |
| st_course  | varchar(10) | YES  |     | NULL    |       |
| st_marks   | int       | YES  |     | NULL    |       |
| st_addr    | varchar(20) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.13 sec)
```

### 12. Create table with P.K and Not Null:

```
mysql> create table course_info(Co_id int(10) primary key not null,co_name varchar(20) not null,co_subjects varchar(10));
Query OK, 0 rows affected, 1 warning (2.13 sec)

mysql> desc table course_info;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| id | select_type | table      | partitions | type | possible_keys | key | key_len | ref | rows | filtered | Extra |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | SIMPLE      | course_info | NULL       | ALL | NULL          | NULL | NULL    | NULL | 1 | 100.00 | NULL |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set, 1 warning (0.29 sec)

mysql> desc course_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Co_id      | int       | NO   | PRI | NULL    |       |
| co_name    | varchar(20) | NO   |     | NULL    |       |
| co_subjects | varchar(10) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.05 sec)
```

### 13. Inserted data in 2<sup>nd</sup> Table:

```
mysql> insert into course_info values(2087,"Computer","Comp Graphics");
Query OK, 1 row affected (0.17 sec)

mysql> insert into course_info values(3065,"EXTC","Analog");
Query OK, 1 row affected (0.23 sec)

mysql> desc course_info;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Co_id      | int       | NO   | PRI | NULL    |       |
| co_name    | varchar(20) | NO   |     | NULL    |       |
| co_subjects | varchar(20) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from course_info;
+-----+-----+-----+
| Co_id | co_name | co_subjects |
+-----+-----+-----+
| 1016  | IT      | Database    |
| 2087  | Computer | Comp Graphics |
| 3065  | EXTC    | Analog      |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

#### 14. Truncate:

```
mysql> Truncate course_info;  
Query OK, 0 rows affected (0.84 sec)  
  
mysql> select * from course_info;  
Empty set (0.35 sec)
```

#### 15. Drop:

```
mysql> show tables;  
+-----+  
| Tables_in_student |  
+-----+  
| course_info       |  
| stud_info         |  
+-----+  
2 rows in set (0.00 sec)  
  
mysql> drop table course_info;  
Query OK, 0 rows affected (1.03 sec)  
  
mysql> show tables;  
+-----+  
| Tables_in_student |  
+-----+  
| stud_info         |  
+-----+  
1 row in set (0.26 sec)
```