

DDL Commands – CREATE, ALTER, DROP

```
mysql> DESC STUDENT;
```

Field	Type	Null	Key	Default	Extra
REG_NO	int	YES		NULL	
NAME	varchar(15)	YES		NULL	
GENDER	char(1)	YES		NULL	
DOB	int	YES		NULL	
MOBILE_NO	int	YES		NULL	
CITY	varchar(15)	YES		NULL	

```
6 rows in set (0.14 sec)
```

```
mysql> DESC COURSE;
```

Field	Type	Null	Key	Default	Extra
COURSE_NO	int	YES		NULL	
COURSE_NAME	varchar(15)	YES		NULL	
SEM_NO	int	YES		NULL	
HALL_NO	int	YES		NULL	
FAC_ID	int	YES		NULL	

```
6 rows in set (0.00 sec)
```

```
mysql> DESC FACULTY;
```

Field	Type	Null	Key	Default	Extra
Faculty_id	int	YES		NULL	
Faculty_name	varchar(15)	YES		NULL	
gender	char(1)	YES		NULL	
faculty_DOB	int	YES		NULL	
faculty_DOJ	int	YES		NULL	
Mobile_number	int	YES		NULL	
dept	char(10)	YES		NULL	

```
7 rows in set (0.01 sec)
```

```
mysql> DESC DEPARTMENT;
```

Field	Type	Null	Key	Default	Extra
DEPT_NO	int	YES		NULL	
DEPT_NAME	varchar(15)	YES		NULL	
DEPT_HEAD	varchar(15)	YES		NULL	

```
3 rows in set (0.00 sec)
```

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

```
mysql> ALTER TABLE STUDENT1  
-> ADD CONSTRAINT NEWID  
-> FOREIGN KEY(REG_NO)  
-> REFERENCES STUDENT(ID);  
Query OK, 0 rows affected (1.38 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESC STUDENT1;
```

Field	Type	Null	Key	Default	Extra
REG_NO	int	YES	MUL	NULL	
NAME	varchar(15)	YES		NULL	
GENDER	char(1)	YES		NULL	

```
3 rows in set (0.00 sec)
```

Query OK, 0 rows affected (2.12 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE DEPARTMENT ADD PRIMARY KEY(DEPT_NO);

Query OK, 0 rows affected (0.78 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql>

mysql> DESC DEPARTMENT;

Field	Type	Null	Key	Default	Extra
DEPT_NO	int	NO	PRI	NULL	
DEPT_NAME	varchar(15)	YES		NULL	
DEPT_HEAD	varchar(15)	YES		NULL	

3 rows in set (0.07 sec)

mysql> DESC FACULTY;

Field	Type	Null	Key	Default	Extra
Faculty_id	int	NO	PRI	NULL	
Faculty_name	varchar(15)	YES		NULL	
gender	char(1)	YES		NULL	
faculty_DOB	int	YES		NULL	
faculty_DOJ	int	YES		NULL	
Mobile_number	int	YES		NULL	
dept	char(10)	YES		NULL	

7 rows in set (0.00 sec)

DML Commands – INSERT, SELECT, UPDATE, DELETE

```
mysql> select * from course;
```

COURSE_NO	REG_NO	COURSE_NAME	SCORES
1	192011494	MATHS	93
2	192011495	MATHS	80
3	192011496	MATHS	75
4	192011497	DBMS	85
5	192011498	DBMS	91

```
5 rows in set (0.00 sec)
```

```
mysql> select course from course where scores between 50 and 85;
```

```
ERROR 1054 (42S22): Unknown column 'course' in 'field list'
```

```
mysql> select course_no from course where scores between 50 and 85;
```

course_no
2
3
4

```
3 rows in set (0.00 sec)
```

```
mysql> SELECT AVG(SCORES) FROM COURSE;
```

AVG(SCORES)
84.8000

```
1 row in set (0.00 sec)
```

```
mysql> SELECT MAX(SCORES),MIN(SCORES),AVG(SCORES),SUM(SCORES) FROM COURSE;
```

MAX(SCORES)	MIN(SCORES)	AVG(SCORES)	SUM(SCORES)
93	75	84.8000	424

```
1 row in set (0.00 sec)
```

```
mysql> SELECT COURSE_NO,COURSE_NAME,COUNT(REG_NO) FROM COURSE WHERE REG_NO LIKE '192011%';
```

COURSE_NO	COURSE_NAME	COUNT(REG_NO)
1	MATHS	5

```
1 row in set (0.00 sec)
```


Query OK, 0 rows affected (2.12 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE DEPARTMENT ADD PRIMARY KEY(DEPT_NO);

Query OK, 0 rows affected (0.78 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql>

mysql> DESC DEPARTMENT;

Field	Type	Null	Key	Default	Extra
DEPT_NO	int	NO	PRI	NULL	
DEPT_NAME	varchar(15)	YES		NULL	
DEPT_HEAD	varchar(15)	YES		NULL	

3 rows in set (0.07 sec)

mysql> DESC FACULTY;

Field	Type	Null	Key	Default	Extra
Faculty_id	int	NO	PRI	NULL	
Faculty_name	varchar(15)	YES		NULL	
gender	char(1)	YES		NULL	
faculty_DOB	int	YES		NULL	
faculty_DOJ	int	YES		NULL	
Mobile_number	int	YES		NULL	
dept	char(10)	YES		NULL	

7 rows in set (0.00 sec)

DML Commands – INSERT, SELECT, UPDATE, DELETE

```
mysql> INSERT INTO STUDENT VALUES(123,"NISHA",'F',2001,123456,"CHENNAI");
Query OK, 1 row affected (0.21 sec)

mysql> INSERT INTO STUDENT VALUES(124,"BRITISH",'F',2002,123786,"DELHI");
Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO STUDENT VALUES(128,"NISH",'F',2003,1237584,"BANGALORE");
Query OK, 1 row affected (0.09 sec)

mysql> SELECT * FROM STUDENT;
+-----+-----+-----+-----+-----+-----+
| REG_NO | NAME   | GENDER | DOB   | MOBILE_NO | CITY   |
+-----+-----+-----+-----+-----+-----+
| 123    | NISHA  | F      | 2001  | 123456    | CHENNAI |
| 124    | BRITISH | F      | 2002  | 123786    | DELHI   |
| 128    | NISH   | F      | 2003  | 1237584   | BANGALORE |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> UPDATE STUDENT SET REG_NO=456 WHERE NAME="NISHA";
Query OK, 1 row affected (0.13 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM STUDENT;
+-----+-----+-----+-----+-----+-----+
| REG_NO | NAME   | GENDER | DOB   | MOBILE_NO | CITY   |
+-----+-----+-----+-----+-----+-----+
| 124    | BRITISH | F      | 2002  | 123786    | DELHI   |
| 128    | NISH   | F      | 2003  | 1237584   | BANGALORE |
| 456    | NISHA  | F      | 2001  | 123456    | CHENNAI |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.03 sec)

mysql> DELETE FROM STUDENT WHERE NAME="NISHA";
Query OK, 1 row affected (0.09 sec)

mysql> SELECT * FROM STUDENT;
+-----+-----+-----+-----+-----+-----+
| REG_NO | NAME   | GENDER | DOB   | MOBILE_NO | CITY   |
+-----+-----+-----+-----+-----+-----+
| 124    | BRITISH | F      | 2002  | 123786    | DELHI   |
| 128    | NISH   | F      | 2003  | 1237584   | BANGALORE |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM STUDENT;
```

REG_NO	NAME	GENDER	DOB	MOBILE_NO	CITY
124	BRITISH	F	2002	123786	DELHI
128	NISH	F	2003	1237584	BANGALORE

2 rows in set (0.00 sec)

```
mysql> SELECT NAME FROM STUDENT WHERE GENDER='F';
```

NAME
BRITISH
NISH

2 rows in set (0.00 sec)

```
mysql> SELECT * FROM STUDENT WHERE NAME LIKE '%SH';
```

REG_NO	NAME	GENDER	DOB	MOBILE_NO	CITY
124	BRITISH	F	2002	123786	DELHI
128	NISH	F	2003	1237584	BANGALORE

2 rows in set (0.00 sec)

```
mysql>
```

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement

```
mysql> use nisha
```

Database changed

```
mysql> DROP TABLE CLASS;
```

Query OK, 0 rows affected (1.70 sec)

```
mysql> CREATE TABLE CLASS(ID INT,NAME VARCHAR(15));
```

Query OK, 0 rows affected (1.09 sec)

```
mysql> INSERT INTO CLASS VALUES(12,"VGVXS");
```

Query OK, 1 row affected (0.17 sec)

```
mysql> COMMIT;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> START TRANSACTION;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> SAVEPOINT A;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> INSERT INTO CLASS VALUES(15,"VGWVC");
```

Query OK, 1 row affected (0.01 sec)

```
mysql> INSERT INTO CLASS VALUES(18,"VGYUC");
```

Query OK, 1 row affected (0.01 sec)

```
mysql> SAVEPOINT B;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> INSERT INTO CLASS VALUES(19,"VFCF");
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO CLASS VALUES(20,"VRWR");
```

Query OK, 1 row affected (0.00 sec)

```
mysql> SAVEPOINT C;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> INSERT INTO CLASS VALUES(23,"VRGEV");
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO CLASS VALUES(234,"VRGOPWJEF");
```

Query OK, 1 row affected (0.00 sec)

```
mysql> SELECT * FROM CLASS;
```

```
+-----+-----+
```