

```
mysql> CREATE DATABASE students1;
Query OK, 1 row affected (0.02 sec)

mysql> USE students1;
Database changed
mysql> CREATE TABLE students (
    -> id INT,
    -> name VARCHAR(50),
    -> age INT
    -> );
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> ALTER TABLE students ADD grade VARCHAR(5);
Query OK, 0 rows affected (0.11 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> DROP TABLE students;
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> CREATE TABLE stud (
    -> id INT,
    -> name VARCHAR(50),
    -> age INT
    -> );
Query OK, 0 rows affected (0.04 sec)

mysql> INSERT INTO stud VALUES (1, 'Amit', 20);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> SELECT * FROM stud;
+----+----+----+
| id | name | age |
+----+----+----+
| 1  | Amit | 20 |
+----+----+----+
1 row in set (0.01 sec)

mysql> TRUNCATE TABLE stud;
Query OK, 0 rows affected (0.05 sec)

mysql> INSERT INTO stud VALUES
-> (2, 'Ravi', 22),
-> (3, 'Neha', 19),
-> (4, 'Sita', 21);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT name, age FROM stud;
+----+----+
| name | age |
+----+----+
| Ravi | 22 |
| Neha | 19 |
| Sita | 21 |
+----+----+
3 rows in set (0.00 sec)
```

```
mysql> UPDATE stud SET age = 23 WHERE name = 'Ravi';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1    Changed: 1    Warnings: 0

mysql> DELETE FROM stud WHERE id = 4;
Query OK, 1 row affected (0.01 sec)

mysql> COMMIT;
Query OK, 0 rows affected (0.00 sec)

mysql> ROLLBACK;
Query OK, 0 rows affected (0.00 sec)

mysql> SAVEPOINT sp1;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> SELECT * FROM stud WHERE age > 20 AND name = 'Ravi'
+----+----+----+
| id | name | age |
+----+----+----+
|   2 | Ravi |   23 |
+----+----+----+
1 row in set (0.00 sec)

mysql> SELECT * FROM stud WHERE age < 20 OR age > 22;
+----+----+----+
| id | name | age |
+----+----+----+
|   2 | Ravi |   23 |
|   3 | Neha |   19 |
+----+----+----+
2 rows in set (0.00 sec)

mysql> SELECT * FROM stud WHERE name LIKE 'A%';
Empty set (0.01 sec)
```

```
mysql> SELECT * FROM stud WHERE age IN (19, 21);
+----+----+----+
| id | name | age |
+----+----+----+
|   3 | Neha |   19 |
+----+----+----+
1 row in set (0.00 sec)

mysql> SELECT * FROM stud WHERE age BETWEEN 20 AND 22;
Empty set (0.01 sec)

mysql> SELECT * FROM stud LIMIT 2;
+----+----+----+
| id | name | age |
+----+----+----+
|   2 | Ravi |   23 |
|   3 | Neha |   19 |
+----+----+----+
2 rows in set (0.00 sec)

mysql> SELECT COUNT(*) FROM stud;
+-----+
| COUNT(*) |
+-----+
|      2 |
+-----+
1 row in set (0.02 sec)
```

```
mysql> SELECT MAX(age) FROM stud;
+-----+
| MAX(age) |
+-----+
|      23   |
+-----+
1 row in set (0.01 sec)

mysql> SELECT MIN(age) FROM stud;
+-----+
| MIN(age) |
+-----+
|      19   |
+-----+
1 row in set (0.00 sec)

mysql> SELECT AVG(age) FROM stud;
+-----+
| AVG(age) |
+-----+
|  21.0000  |
+-----+
1 row in set (0.01 sec)
```

```
mysql> CREATE TABLE marks (
    -> id INT,
    -> marks INT
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO marks VALUES
    -> (1, 85),
    -> (2, 90),
    -> (3, 78);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT stud.name, marks.marks
    -> FROM stud
    -> INNER JOIN marks ON stud.id = marks.id;
+-----+-----+
| name | marks |
+-----+-----+
| Ravi |    90 |
| Neha |    78 |
+-----+-----+
2 rows in set (0.01 sec)
```

```
mysql> CREATE TABLE teachers(
->   id INT PRIMARY KEY,
->   name VARCHAR(50)
-> );
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> CREATE TABLE courses (
->   id INT,
->   cname VARCHAR(50) NOT NULL
-> );
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> CREATE TRIGGER check_age
-> BEFORE INSERT ON stud
-> FOR EACH ROW
-> SET NEW.age = 18;
Query OK, 0 rows affected (0.04 sec)
```