

```
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)
```