```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| contacts           |
| dbperson           |
| dbperson1          |
| dsml12pm           |
| information_schema |
| mysql              |
| p_hotel            |
| p_login            |
| p_transport        |
| performance_schema |
| person             |
| phpmyadmin         |
| piet               |
| test               |
+--------------------+
14 rows in set (0.002 sec)

MariaDB [(none)]> use dsml12pm;
Database changed
MariaDB [dsml12pm]> show tables;
+--------------------+
| Tables_in_dsml12pm |
+--------------------+
| student            |
+--------------------+
1 row in set (0.001 sec)
```

```
MariaDB [dsml12pm]> select * from student;
+------+------+------+
| sid  | name | age  |
+------+------+------+
|  101 | aman |   22 |
+------+------+------+
1 row in set (0.001 sec)

MariaDB [dsml12pm]> insert into student values(102,'rohan',23);
Query OK, 1 row affected (0.008 sec)

MariaDB [dsml12pm]> select * from student;
+------+-------+------+
| sid  | name  | age  |
+------+-------+------+
|  101 | aman  |   22 |
|  102 | rohan |   23 |
+------+-------+------+
2 rows in set (0.001 sec)

MariaDB [dsml12pm]> select sid, name from student;
+------+-------+
| sid  | name  |
+------+-------+
|  101 | aman  |
|  102 | rohan |
+------+-------+
2 rows in set (0.001 sec)
```

```
MariaDB [dsml12pm]> ----->>>>>  ____INSERTING DATA INTO MULTIPLE ROWS____
MariaDB [dsml12pm]>

MariaDB [dsml12pm]> select * from student;
+------+-------+------+
| sid  | name  | age  |
+------+-------+------+
|  101 | aman  |   22 |
|  102 | rohan |   23 |
|  103 | ram   |   24 |
|  104 | rajat |   21 |
+------+-------+------+
4 rows in set (0.001 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]> insert into student values(105,'simran');
ERROR 1136 (21S01): Column count doesn't match value count at row 1
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> insert into student(sid, name) values(105,'simran');
Query OK, 1 row affected (0.007 sec)

MariaDB [dsml12pm]> select * from student;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
```

```
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> desc student;
+--------+--------------+------+-----+---------+-------+
| Field  | Type         | Null | Key | Default | Extra |
+--------+--------------+------+-----+---------+-------+
| sid    | int(5)       | YES  |     | NULL    |       |
| name   | varchar(100) | YES  |     | NULL    |       |
| age    | int(5)       | YES  |     | NULL    |       |
+--------+--------------+------+-----+---------+-------+
3 rows in set (0.037 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from student;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> create table fees(fid int(5), fees double, discount double, paid
double);
```

```
Query OK, 0 rows affected (0.042 sec)

MariaDB [dsml12pm]> select * from fees;
Empty set (0.003 sec)

MariaDB [dsml12pm]> insert into fees values(101,20000,1000,4000),
(102,30000,2000,12000), (103,20000,0,9000), (104,25000,0,15000);
Query OK, 4 rows affected (0.006 sec)
Records: 4  Duplicates: 0  Warnings: 0

MariaDB [dsml12pm]> select * from fees;
+------+-------+----------+-------+
| fid  | fees  | discount | paid  |
+------+-------+----------+-------+
|  101 | 20000 |     1000 |  4000 |
|  102 | 30000 |     2000 | 12000 |
|  103 | 20000 |        0 |  9000 |
|  104 | 25000 |        0 | 15000 |
+------+-------+----------+-------+
4 rows in set (0.004 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> ----->>>>>  ____WHERE CLAUSE____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from student;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
```

```
|   102 | rohan  |    23 |
|   103 | ram    |    24 |
|   104 | rajat  |    21 |
|   105 | simran |  NULL |
+------+-------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from student where age>22;
+------+-------+------+
| sid  | name  | age  |
+------+-------+------+
|   102 | rohan |    23 |
|   103 | ram   |    24 |
+------+-------+------+
2 rows in set (0.005 sec)

MariaDB [dsml12pm]> select * from fees where fees=20000;
+------+-------+----------+------+
| fid  | fees  | discount | paid |
+------+-------+----------+------+
|   101 | 20000 |     1000 | 4000 |
|   103 | 20000 |        0 | 9000 |
+------+-------+----------+------+
2 rows in set (0.003 sec)

MariaDB [dsml12pm]> select * from fees where fees=20000 and discount=0;
+------+-------+----------+------+
| fid  | fees  | discount | paid |
+------+-------+----------+------+
|   103 | 20000 |        0 | 9000 |
```

```
+------+-------+----------+------+
1 row in set (0.007 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from student where name='ram';
+------+------+------+
| sid  | name | age  |
+------+------+------+
|  103 | ram  |   24 |
+------+------+------+
1 row in set (0.003 sec)

MariaDB [dsml12pm]> select * from student where name='ram' or name='simran'or
name='aman';
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  103 | ram    |   24 |
|  105 | simran | NULL |
+------+--------+------+
3 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from student where name in('aman','ram','rohan');
+------+-------+------+
| sid  | name  | age  |
+------+-------+------+
|  101 | aman  |   22 |
|  102 | rohan |   23 |
|  103 | ram   |   24 |
```

```
+------+-------+------+
3 rows in set (0.003 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from student;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from student where not name='aman';
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
4 rows in set (0.001 sec)

MariaDB [dsml12pm]>
```

```
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> ----->>>>>  ____ORDER BY CLAUSE____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from student order by name;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  104 | rajat  |   21 |
|  103 | ram    |   24 |
|  102 | rohan  |   23 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.004 sec)

MariaDB [dsml12pm]> select * from student order by age;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  105 | simran | NULL |
|  104 | rajat  |   21 |
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from student order by age desc;
+------+--------+------+
| sid  | name   | age  |
```

```
+------+--------+------+
| 103  | ram    |  24  |
| 102  | rohan  |  23  |
| 101  | aman   |  22  |
| 104  | rajat  |  21  |
| 105  | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from fees;
+------+-------+----------+-------+
| fid  | fees  | discount | paid  |
+------+-------+----------+-------+
| 101  | 20000 |     1000 |  4000 |
| 102  | 30000 |     2000 | 12000 |
| 103  | 20000 |        0 |  9000 |
| 104  | 25000 |        0 | 15000 |
+------+-------+----------+-------+
4 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from fees order by fees;
+------+-------+----------+-------+
| fid  | fees  | discount | paid  |
+------+-------+----------+-------+
| 101  | 20000 |     1000 |  4000 |
| 103  | 20000 |        0 |  9000 |
| 104  | 25000 |        0 | 15000 |
| 102  | 30000 |     2000 | 12000 |
```

```
+------+-------+----------+-------+
4 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from fees order by fees, discount;
+------+-------+----------+-------+
| fid  | fees  | discount | paid  |
+------+-------+----------+-------+
|  103 | 20000 |        0 |  9000 |
|  101 | 20000 |     1000 |  4000 |
|  104 | 25000 |        0 | 15000 |
|  102 | 30000 |     2000 | 12000 |
+------+-------+----------+-------+
4 rows in set (0.001 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> ----->>>>>   ____DROP, DELETE, TRUNCATE____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> ----->>>>>   ____DROP____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> show databases;
+--------------------+
| Database           |
+--------------------+
| contacts           |
| dbperson           |
| dbperson1          |
| dsml12pm           |
| information_schema |
```

```
| mysql              |
| p_hotel            |
| p_login            |
| p_transport        |
| performance_schema |
| person             |
| phpmyadmin         |
| piet               |
| test               |
+--------------------+
14 rows in set (0.002 sec)

MariaDB [dsml12pm]> create database new;
Query OK, 1 row affected (0.005 sec)

MariaDB [dsml12pm]> show databases;
+--------------------+
| Database           |
+--------------------+
| contacts           |
| dbperson           |
| dbperson1          |
| dsml12pm           |
| information_schema |
| mysql              |
| new                |
| p_hotel            |
| p_login            |
| p_transport        |
| performance_schema |
```

```
| person             |
| phpmyadmin         |
| piet               |
| test               |
+--------------------+
15 rows in set (0.001 sec)

MariaDB [dsml12pm]> drop database new;
Query OK, 0 rows affected (0.043 sec)

MariaDB [dsml12pm]> show databases;
+--------------------+
| Database           |
+--------------------+
| contacts           |
| dbperson           |
| dbperson1          |
| dsml12pm           |
| information_schema |
| mysql              |
| p_hotel            |
| p_login            |
| p_transport        |
| performance_schema |
| person             |
| phpmyadmin         |
| piet               |
| test               |
+--------------------+
14 rows in set (0.001 sec)
```

```
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> show tables;
+-------------------+
| Tables_in_dsml12pm |
+-------------------+
| fees              |
| student           |
+-------------------+
2 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from student;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> ----->>>>>  ____MAKING COPY OF TABLE____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> create table new as select * from student;
Query OK, 5 rows affected (0.083 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
MariaDB [dsml12pm]> select * from new;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> drop table new;
Query OK, 0 rows affected (0.036 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]> show tables;
+--------------------+
| Tables_in_dsml12pm |
+--------------------+
| fees               |
| student            |
+--------------------+
2 rows in set (0.001 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]> ----->>>>>  ____DELETE____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> create table new as select * from student;
Query OK, 5 rows affected (0.063 sec)
```

```
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [dsml12pm]> show tables;
+-------------------+
| Tables_in_dsml12pm |
+-------------------+
| fees              |
| new               |
| student           |
+-------------------+
3 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from new;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> delete from new where age>22;
Query OK, 2 rows affected (0.009 sec)

MariaDB [dsml12pm]> select * from new;
+------+--------+------+
| sid  | name   | age  |
```

```
+------+--------+------+
| 101  | aman   |  22  |
| 104  | rajat  |  21  |
| 105  | simran | NULL |
+------+--------+------+
3 rows in set (0.001 sec)

MariaDB [dsml12pm]> delete from new;
Query OK, 3 rows affected (0.013 sec)

MariaDB [dsml12pm]> show tables;
+--------------------+
| Tables_in_dsml12pm |
+--------------------+
| fees               |
| new                |
| student            |
+--------------------+
3 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from new;
Empty set (0.001 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> ----->>>>>  _____TRUNCATE_____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> show tables
    -> ;
+--------------------+
```

```
| Tables_in_dsml12pm |
+--------------------+
| fees               |
| new                |
| student            |
+--------------------+
3 rows in set (0.001 sec)

MariaDB [dsml12pm]> drop table new;
Query OK, 0 rows affected (0.037 sec)

MariaDB [dsml12pm]> show tables;
+--------------------+
| Tables_in_dsml12pm |
+--------------------+
| fees               |
| student            |
+--------------------+
2 rows in set (0.001 sec)

MariaDB [dsml12pm]> create table new as select * from student;
Query OK, 5 rows affected (0.048 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [dsml12pm]> show tables;
+--------------------+
| Tables_in_dsml12pm |
+--------------------+
| fees               |
| new                |
```

```
| student            |
+--------------------+
3 rows in set (0.001 sec)

MariaDB [dsml12pm]> select * from new;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]> truncate new;
Query OK, 0 rows affected (0.063 sec)

MariaDB [dsml12pm]> select * from new;
Empty set (0.001 sec)

MariaDB [dsml12pm]> drop table new;
Query OK, 0 rows affected (0.027 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
```

```
MariaDB [dsml12pm]> ----->>>>>  ____AGGREGATE FUNCTIONS____
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> ----->>>>>  count, max, min, sum, avg
MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from fees;
+------+-------+----------+-------+
| fid  | fees  | discount | paid  |
+------+-------+----------+-------+
|  101 | 20000 |     1000 |  4000 |
|  102 | 30000 |     2000 | 12000 |
|  103 | 20000 |        0 |  9000 |
|  104 | 25000 |        0 | 15000 |
+------+-------+----------+-------+
4 rows in set (0.001 sec)

MariaDB [dsml12pm]> select sum(fees) from fees;
+-----------+
| sum(fees) |
+-----------+
|     95000 |
+-----------+
1 row in set (0.006 sec)

MariaDB [dsml12pm]> select sum(paid) from fees;
+-----------+
| sum(paid) |
+-----------+
|     40000 |
```

```
+-----------+
1 row in set (0.001 sec)

MariaDB [dsml12pm]> select sum(fees) - sum(paid) as remainingfees from fees;
+---------------+
| remainingfees |
+---------------+
|         55000 |
+---------------+
1 row in set (0.007 sec)

MariaDB [dsml12pm]>
MariaDB [dsml12pm]>
MariaDB [dsml12pm]> select * from student;
+------+--------+------+
| sid  | name   | age  |
+------+--------+------+
|  101 | aman   |   22 |
|  102 | rohan  |   23 |
|  103 | ram    |   24 |
|  104 | rajat  |   21 |
|  105 | simran | NULL |
+------+--------+------+
5 rows in set (0.001 sec)

MariaDB [dsml12pm]> select count(*) from student;
+----------+
| count(*) |
+----------+
|        5 |
```

```
+----------+
1 row in set (0.001 sec)

MariaDB [dsml12pm]> select count(sid) from student;
+------------+
| count(sid) |
+------------+
|          5 |
+------------+
1 row in set (0.001 sec)

MariaDB [dsml12pm]> select count(age) from student;
+------------+
| count(age) |
+------------+
|          4 |
+------------+
1 row in set (0.001 sec)
```