

```
$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 5
Server version: 5.7.37-0ubuntu0.18.04.1 (Ubuntu)
```

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

```
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| BANK      |
| COLLEGE   |
| EMPDE     |
| SCHOOL    |
| SOE       |
| STATES    |
| STUDENT   |
| soe       |
| soel      |
| std       |
| wordpress |
| work      |
+-----+
41 rows in set (0.34 sec)
```

```
mysql> DROP DATABASE STUDENT;
Query OK, 1 row affected (0.22 sec)
```

```
mysql> CREATE DATABASE STUDENT;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> USE STUDENT;
Database changed
mysql> SHOW TABLES;
Empty set (0.00 sec)
```

```
mysql> CREATE TABLE STUDENT(rollno INT PRIMARY KEY, name VARCHAR(28), age INT, branch
VARCHAR(28));
Query OK, 0 rows affected (0.27 sec)
```

```
mysql> DESC STUDENT;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| rollno | int(11)       | NO   | PRI | NULL    |       |
| name   | varchar(28)   | YES  |     | NULL    |       |
| age    | int(11)       | YES  |     | NULL    |       |
| branch | varchar(28)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> INSERT INTO STUDENT VALUES(1,'Gokul',19,'CS');
Query OK, 1 row affected (0.05 sec)
```

```
mysql> INSERT INTO STUDENT VALUES(2,'Rahul',21,'CE');
Query OK, 1 row affected (0.03 sec)
```

```
mysql> INSERT INTO STUDENT VALUES(3,'Jeevan',20,'CS');
Query OK, 1 row affected (0.03 sec)
```

```
mysql> INSERT INTO STUDENT VALUES(4,'Joe',22,'MECH');
Query OK, 1 row affected (0.14 sec)
```

```
mysql> SELECT * FROM STUDENT;
+-----+-----+-----+-----+
| rollno | name  | age | branch |
+-----+-----+-----+-----+
| 1      | Gokul | 19  | CS     |
+-----+-----+-----+-----+
```

2	Rahul	21	CE
3	Jeevan	20	CS
4	Joe	22	MECH

4 rows in set (0.00 sec)

```
mysql> ALTER TABLE STUDENT ADD COLUMN TOTAL_MARKS INT;
Query OK, 0 rows affected (0.57 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> UPDATE STUDENT SET TOTAL_MARKS=40 WHERE rollno=1;
Query OK, 1 row affected (0.08 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE STUDENT SET TOTAL_MARKS=59 WHERE rollno=2;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE STUDENT SET TOTAL_MARKS=45 WHERE rollno=3;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> UPDATE STUDENT SET TOTAL_MARKS=50 WHERE rollno=4;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

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

rollno	name	age	branch	TOTAL_MARKS
1	Gokul	19	CS	40
2	Rahul	21	CE	59
3	Jeevan	20	CS	45
4	Joe	22	MECH	50

4 rows in set (0.00 sec)

```
mysql> ALTER TABLE STUDENT CHANGE COLUMN name STUDENT_NAME VARCHAR(28);
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE STUDENT CHANGE COLUMN rollno STUDENT_ROLLNO INT;
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

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

STUDENT_ROLLNO	STUDENT_NAME	age	branch	TOTAL_MARKS
1	Gokul	19	CS	40
2	Rahul	21	CE	59
3	Jeevan	20	CS	45
4	Joe	22	MECH	50

4 rows in set (0.00 sec)

```
mysql> SELECT * FROM STUDENT WHERE branch='CS';
```

STUDENT_ROLLNO	STUDENT_NAME	age	branch	TOTAL_MARKS
1	Gokul	19	CS	40
3	Jeevan	20	CS	45

2 rows in set (0.00 sec)

```
mysql> SELECT MAX(TOTAL_MARKS) AS MAXIMUM_MARK FROM STUDENT;
```

MAXIMUM_MARK
59

1 row in set (0.00 sec)

```
mysql> SELECT MIN(TOTAL_MARKS) AS MINIMUM_MARKS FROM STUDENT;
```

MINIMUM_MARKS

```
+-----+
|          40 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT AVG(TOTAL_MARKS) AS AVERAGE_MARKS FROM STUDENT;
```

```
+-----+
| AVERAGE_MARKS |
+-----+
|          48.5000 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT MAX(TOTAL_MARKS) AS MAXIMUM_MARK, MIN(TOTAL_MARKS) AS
MINIMUM_MARK, AVG(TOTAL_MARKS) AS AVERAGE_MARK FROM STUDENT;
```

```
+-----+-----+-----+
| MAXIMUM_MARK | MINIMUM_MARK | AVERAGE_MARK |
+-----+-----+-----+
|          59 |          40 |          48.5000 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT * FROM STUDENT WHERE TOTAL_MARKS=(SELECT MAX(TOTAL_MARKS) FROM STUDENT);
```

```
+-----+-----+-----+-----+-----+
| STUDENT_ROLLNO | STUDENT_NAME | age | branch | TOTAL_MARKS |
+-----+-----+-----+-----+-----+
|          2 | Rahul | 21 | CE |          59 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT * FROM STUDENT WHERE TOTAL_MARKS=(SELECT MIN(TOTAL_MARKS) FROM STUDENT);
```

```
+-----+-----+-----+-----+-----+
| STUDENT_ROLLNO | STUDENT_NAME | age | branch | TOTAL_MARKS |
+-----+-----+-----+-----+-----+
|          1 | Gokul | 19 | CS |          40 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```