

```
[sudo] password for ashtray09:
root@ashtray09:~# sudo systemctl start mysql
root@ashtray09:~# mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.35-0ubuntu0.22.04.1 (Ubuntu)
```

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

```
mysql> CREATE DATABASE university;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> CREATE TABLE student (
  -> id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  -> name VARCHAR(50) NOT NULL,
  -> course INT,
  -> GPA DECIMAL(3,2) NOT NULL
  -> );
```

ERROR 1046 (3D000): No database selected

```
mysql> USE university;
```

Database changed

```
mysql> CREATE TABLE student (
  -> id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  -> name VARCHAR(50) NOT NULL,
  -> course INT NOT NULL,
  -> GPA DECIMAL(3,2) NOT NULL
  -> );
```

Query OK, 0 rows affected (0.02 sec)

```
mysql>
```

```
mysql> CREATE TABLE Student (
  -> id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  -> name VARCHAR (70) NOT NULL,
  -> course INT NOT NULL,
  -> GPA DECIMAL(3,2)
  -> );
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> SHOW TABLES;
```

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

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Booth","2","4.25");
Query OK, 1 row affected (0.03 sec)
```

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Candy","3","4.45");
Query OK, 1 row affected (0.05 sec)
```

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Molly","2","3.45");
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Kate","2","3.85");
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Alex","4","4.50");
Query OK, 1 row affected (0.05 sec)
```

```
mysql> _
```

| id | name | course | GPA |
|----|-------|--------|------|
| 1 | Booth | 2 | 4.25 |
| 2 | Candy | 3 | 4.45 |
| 3 | Molly | 2 | 3.45 |
| 4 | Kate | 2 | 3.85 |
| 5 | Alex | 4 | 4.50 |

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM Student WHERE course=2;
```

| id | name | course | GPA |
|----|-------|--------|------|
| 1 | Booth | 2 | 4.25 |
| 3 | Molly | 2 | 3.45 |
| 4 | Kate | 2 | 3.85 |

3 rows in set (0.00 sec)

```
mysql> UPDATE Student SET GPA = GPA + 0.5 WHERE GPA < 4.51;
```

Query OK, 5 rows affected (0.01 sec)

Rows matched: 5 Changed: 5 Warnings: 0

```
mysql> SELECT * FROM Student;
```

| id | name | course | GPA |
|----|-------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 2 | Candy | 3 | 4.95 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |
| 5 | Alex | 4 | 5.00 |

5 rows in set (0.00 sec)

```
mysql> _
```

```
mysql> UPDATE Student SET GPA = GPA + 0.25 WHERE id = 2;
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '+ GPA + 0.25 WHERE id = 2' at line 1

```
mysql> UPDATE Student SET GPA = GPA + 0.25 WHERE id = 2;
```

Query OK, 1 row affected (0.05 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> SELECT * FROM Student;
```

| id | name | course | GPA |
|----|-------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 2 | Candy | 3 | 5.20 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |
| 5 | Alex | 4 | 5.00 |

5 rows in set (0.00 sec)

```
mysql>
```

```
mysql> UPDATE Student SET GPA = 5 WHERE id = 5;
```

Query OK, 0 rows affected (0.00 sec)

Rows matched: 1 Changed: 0 Warnings: 0

```
mysql> SELECT * FROM Student;
```

| id | name | course | GPA |
|----|-------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 2 | Candy | 3 | 5.20 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |
| 5 | Alex | 4 | 5.00 |

5 rows in set (0.00 sec)

```
mysql> _
```

```
mysql> UPDATE Student SET name = 'Ivan Petrov' WHERE id = 2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> SELECT * FROM Student;
```

| id | name | course | GPA |
|----|-------------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 2 | Ivan Petrov | 3 | 5.20 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |
| 5 | Alex | 4 | 5.00 |

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

```
mysql>
```

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Tolik","1","2.85");
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Dima","3","2.54");
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM Student;
```

| id | name | course | GPA |
|----|-------------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 2 | Ivan Petrov | 3 | 5.20 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |
| 5 | Alex | 4 | 5.00 |
| 6 | Tolik | 1 | 2.85 |
| 7 | Dima | 3 | 2.54 |

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

```
mysql> _
```

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

```
mysql> DELETE FROM Student WHERE GPA < 3;
Query OK, 2 rows affected (0.00 sec)
```

```
mysql> INSERT INTO Student (name,course,GPA) VALUES ("Oleksiy Kovalenko","1","4.20");
Query OK, 1 row affected (0.00 sec)
```

```
mysql> COMMIT;
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> SELECT * FROM Student;
```

| id | name | course | GPA |
|----|-------------------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 2 | Ivan Petrov | 3 | 5.20 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |
| 5 | Alex | 4 | 5.00 |
| 6 | Oleksiy Kovalenko | 1 | 4.20 |

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

```
mysql>
```

```
mysql> UPDATE Student SET id = 6 WHERE name = "Oleksiy Kovalenko";
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> SELECT * FROM Student;
```

| id | name | course | GPA |
|----|-------------------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 2 | Ivan Petrov | 3 | 5.20 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |
| 5 | Alex | 4 | 5.00 |
| 6 | Oleksiy Kovalenko | 1 | 4.20 |

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

```
mysql> _
```

```
mysql> SELECT * FROM Student WHERE course = 1 AND GPA > 4;
```

| id | name | course | GPA |
|----|-------------------|--------|------|
| 6 | Oleksiy Kovalenko | 1 | 4.20 |

1 row in set (0.00 sec)

```
mysql> SELECT * FROM Student WHERE course = 1 ;
```

| id | name | course | GPA |
|----|-------------------|--------|------|
| 6 | Oleksiy Kovalenko | 1 | 4.20 |

1 row in set (0.00 sec)

```
mysql> SELECT * FROM Student WHERE course = 2 ;
```

| id | name | course | GPA |
|----|-------|--------|------|
| 1 | Booth | 2 | 4.75 |
| 3 | Molly | 2 | 3.95 |
| 4 | Kate | 2 | 4.35 |

3 rows in set (0.00 sec)

```
mysql> SELECT * FROM Student WHERE course = 3;
```

| id | name | course | GPA |
|----|-------------|--------|------|
| 2 | Ivan Petrov | 3 | 5.20 |

1 row in set (0.00 sec)

```
mysql>
```

```
mysql> SELECT * FROM Student WHERE course = 4;
```

| id | name | course | GPA |
|----|------|--------|------|
| 5 | Alex | 4 | 5.00 |

1 row in set (0.00 sec)

```
mysql>
```