# Student Database

## User Manual

## Content:



### 1. MySQL Download & Install

Firstly go to the google and search mysql download.

Download Link: https://dev.mysql.com/downloads/installer/

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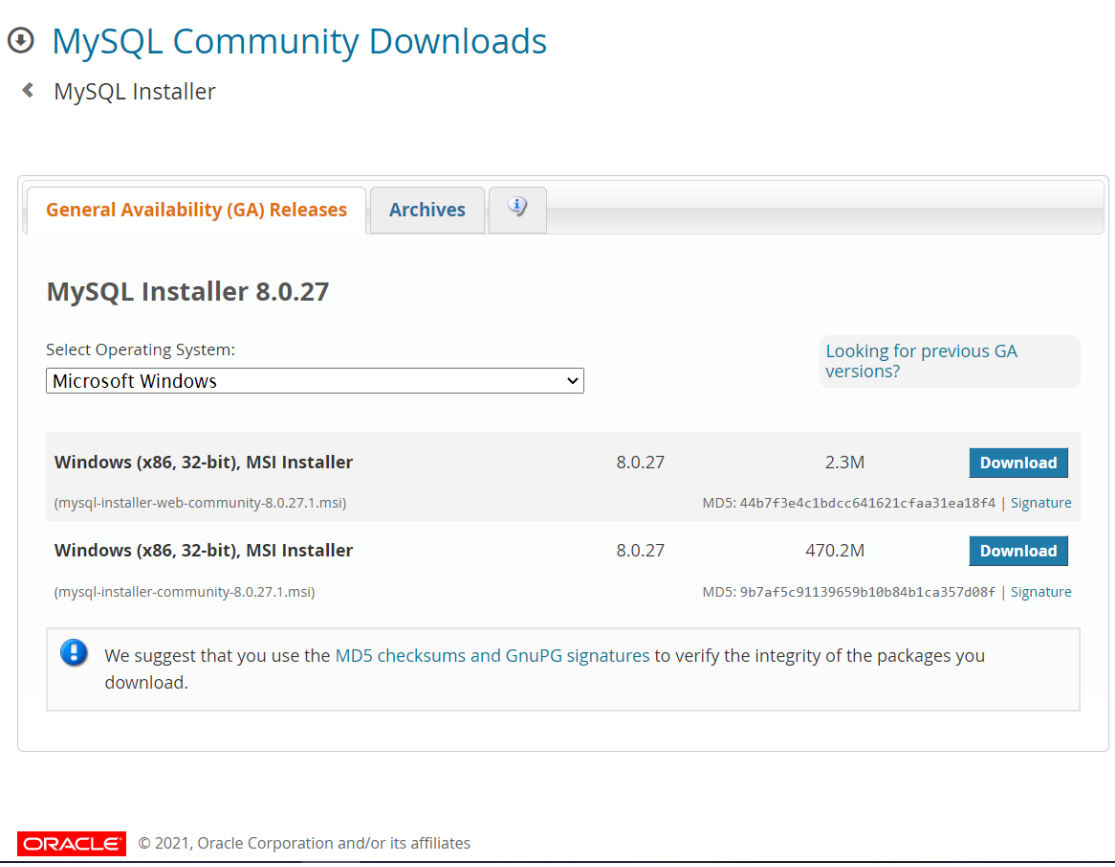


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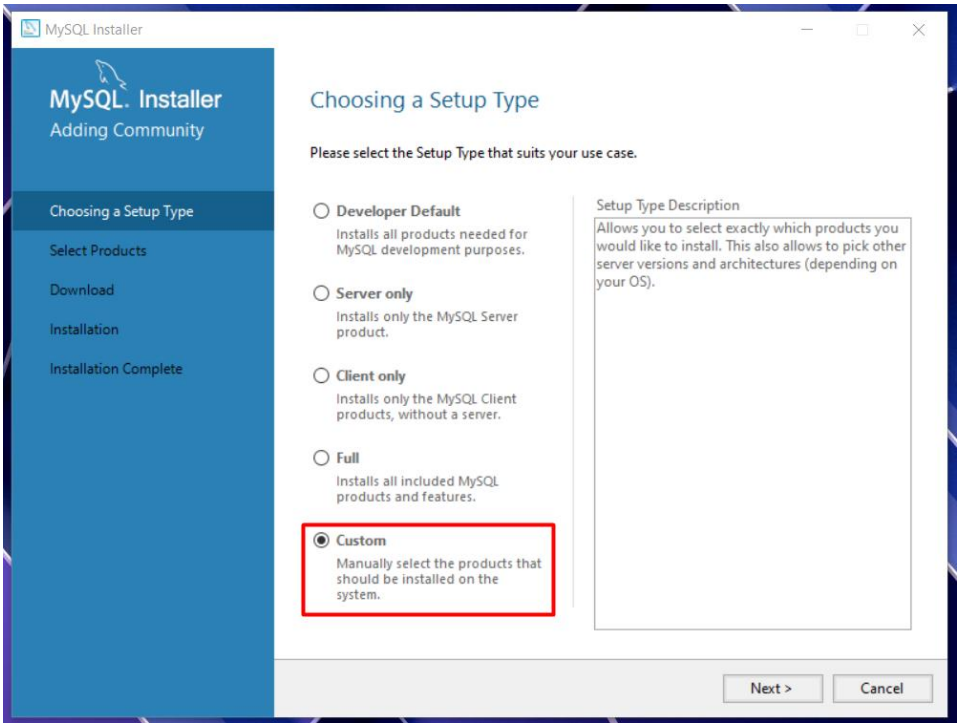
After complete the download then the install the mysql software.

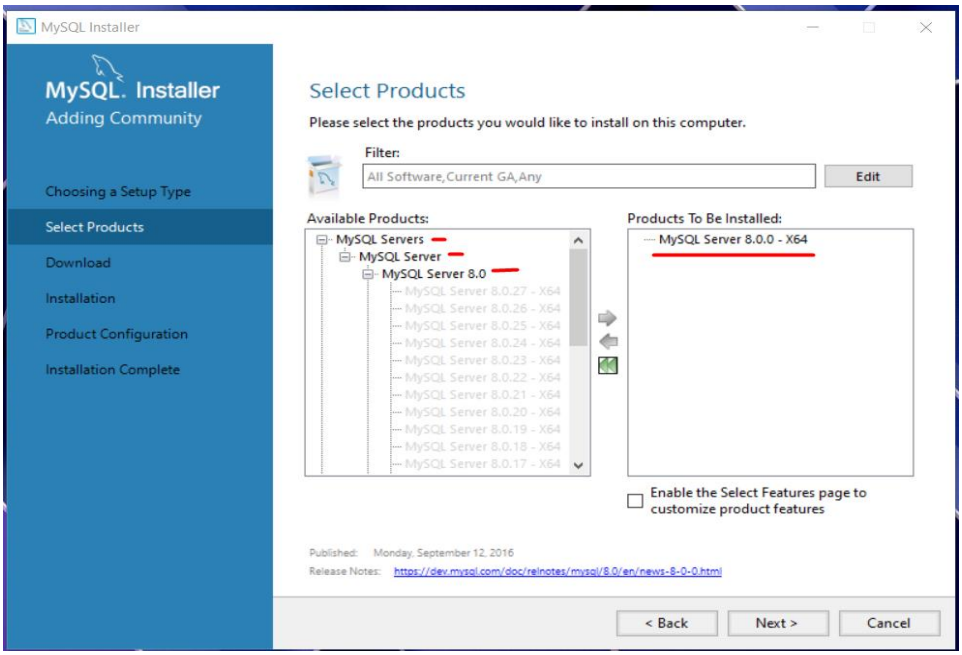
**Step1:**

Select custom then click next .



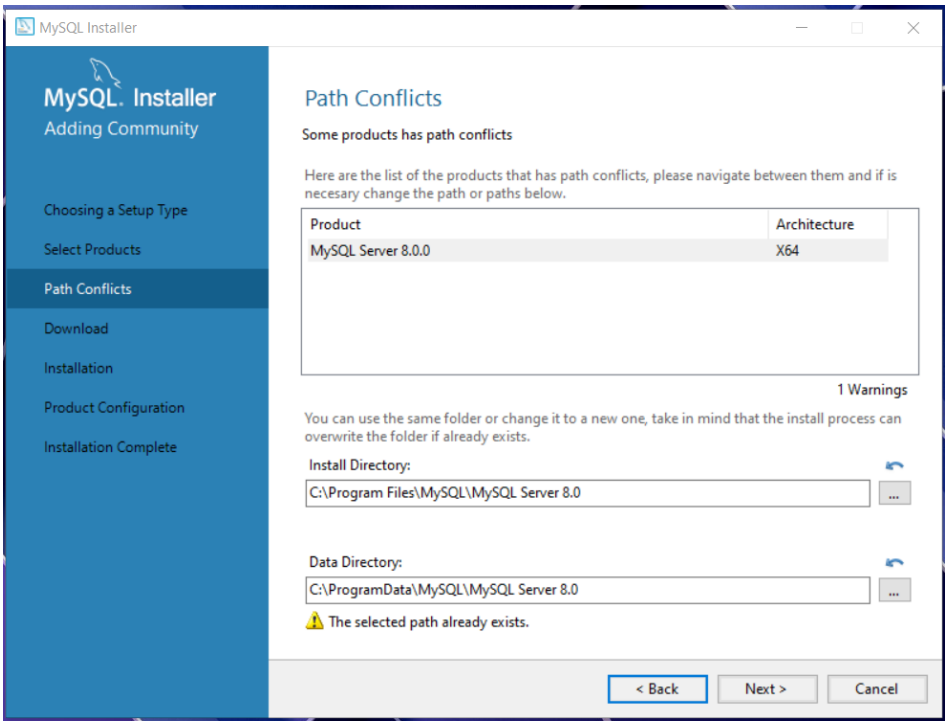

**Step2:**

Select MySQL Server 8.0.0 and hit the next button.



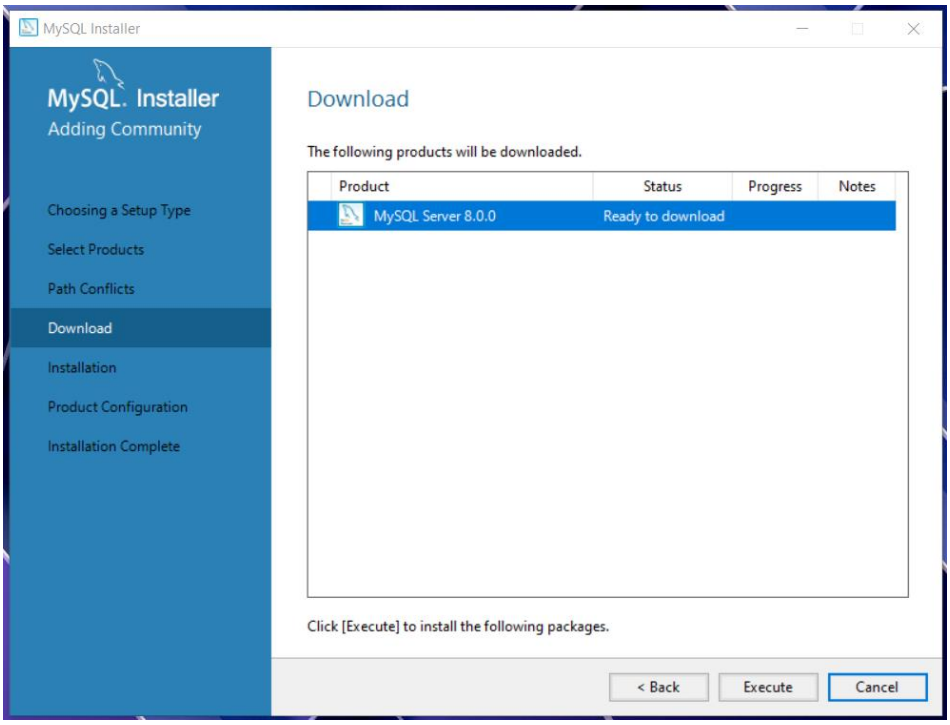
**Step3:**

Click the next button.



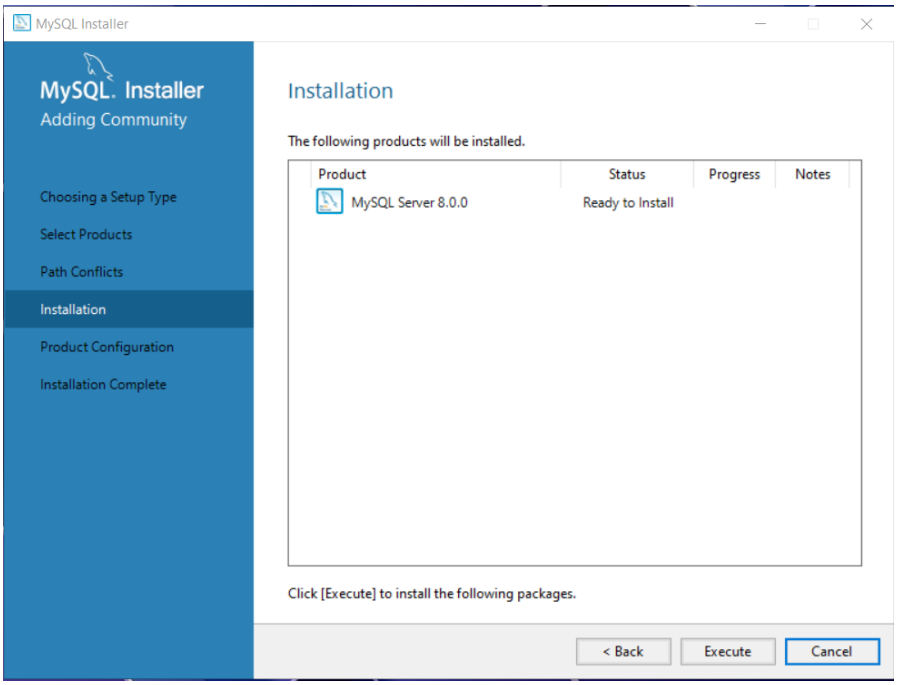

**Step4:**

Click the execute button.



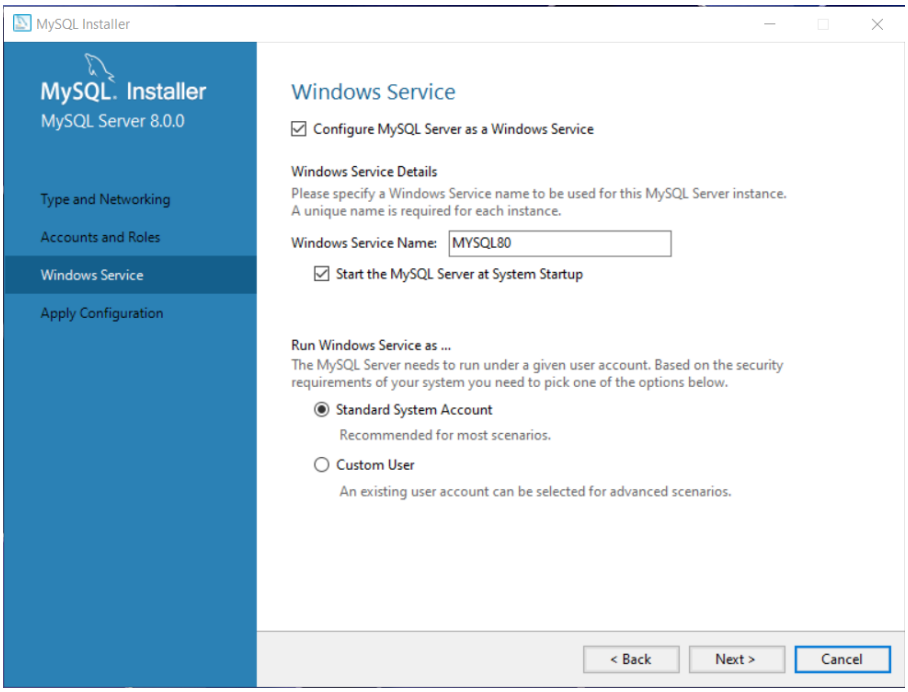
**Step5:**

Click the execute button.



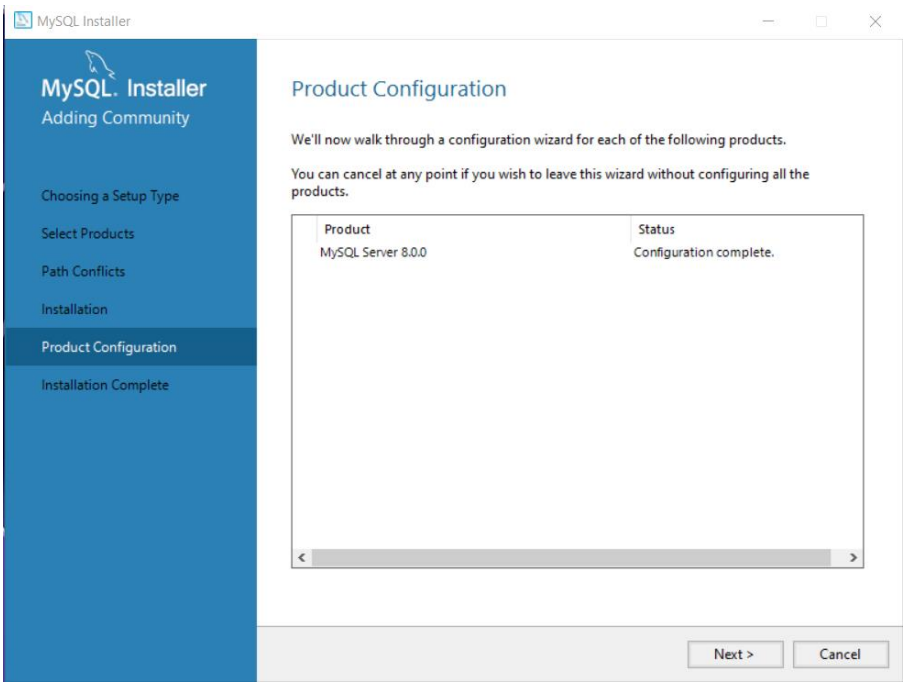

**Step6:**

Select Standard system account and hit the next button.



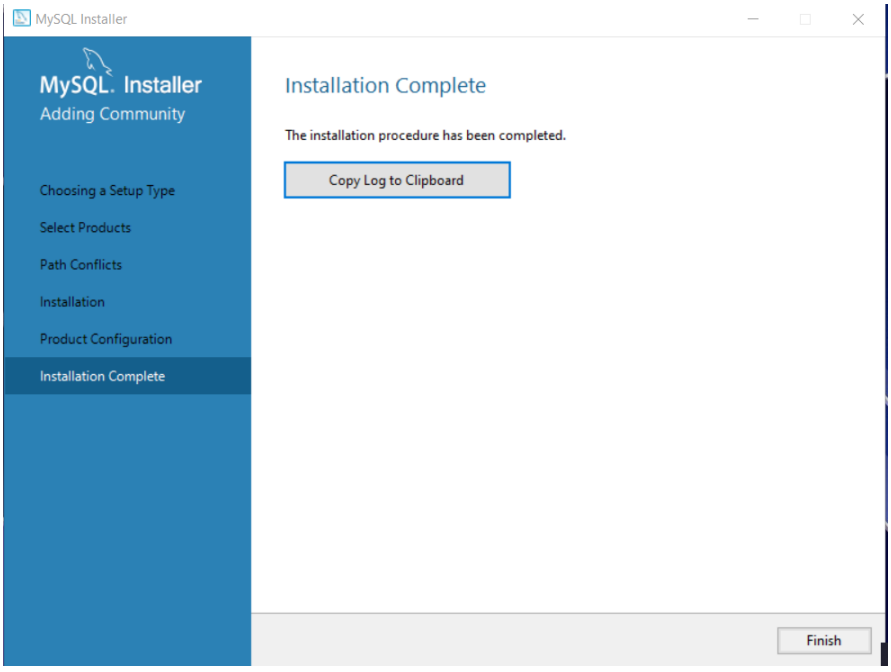
**Step7:**

Click the next button.



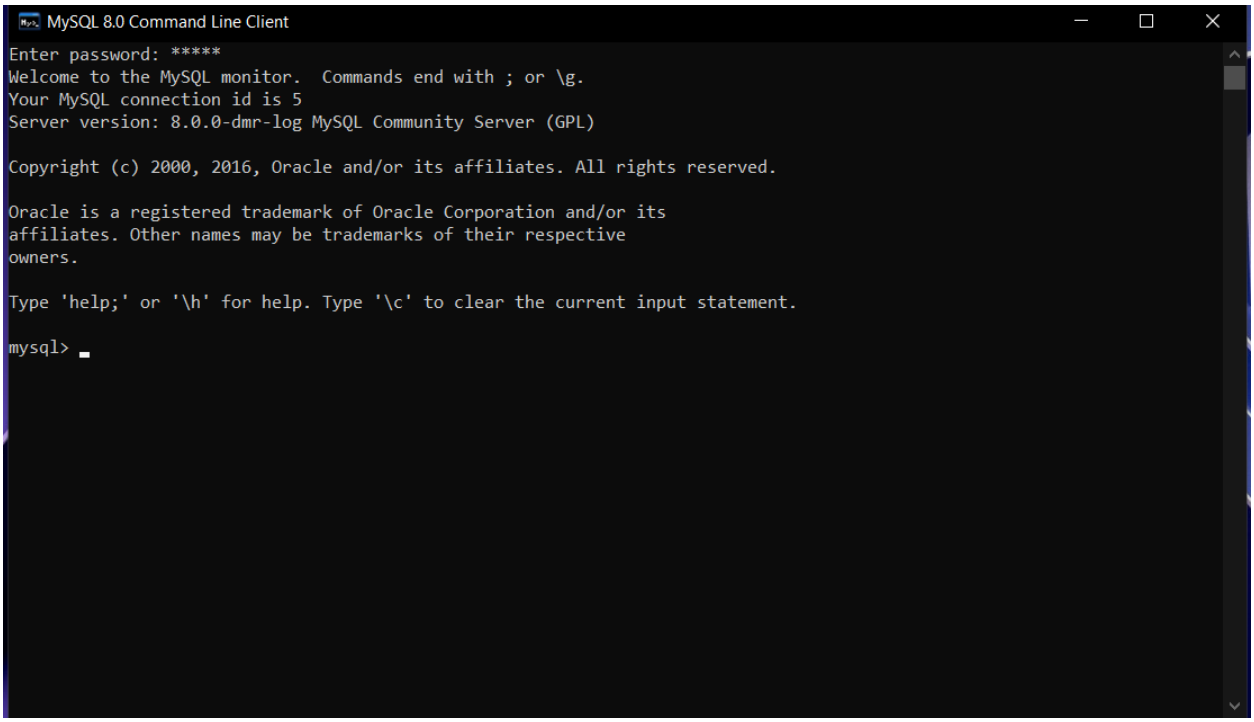

**Step8:**

Click the Finish button.



**Step9:**

Lets Open the MySQL Command Line. And practice youself.



## 2. Create Database

“create database” command is used to create a database. And “show databases” command works for showing all databases.

**Syntax**: create database databasename;

**Command:**

create database student;

show databases;

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| student            |
| sys                |
+--------------------+
5 rows in set (0.01 sec)
```

I create a database named “student”.  Then “use database_name” command works for use database.

**Command:**

use student;

```
mysql> use student;
Database changed
```

## 3. Create Table

“create table table_name” statement is used to create a new table in a database. creates a table called "tab1" that contains four columns: FirstName, LastName, Address, Email.

Create another table named “tab2” that contains four columns: Id, Department, Semester, Cgpa.

**Syntax**: create table table_name (
   column1 datatype,
   column2 datatype,
   column3 datatype,
  ....
);

**Command:**

```
create table tab1(
   -> FirstName varchar(100),
   -> LastName varchar(100),
   -> Address varchar(300),
   -> Email varchar(100)
   -> );
create table tab2(
   -> Id int(11) not null,
   -> Department varchar(100),
   -> Semester varchar(50),
   -> Cgpa varchar(50) not null,
   -> primary key(Id)
   -> );
```

**Note:** “describe table_name” statement is used to describe the table.

**Command:**

```
describe tab1;
```

```
mysql> describe tab1;
+-----------+--------------+------+-----+---------+-------+
| Field     | Type         | Null | Key | Default | Extra |
+-----------+--------------+------+-----+---------+-------+
| FirstName | varchar(100) | YES  |     | NULL    |       |
| LastName  | varchar(100) | YES  |     | NULL    |       |
| Address   | varchar(300) | YES  |     | NULL    |       |
| Email     | varchar(100) | YES  |     | NULL    |       |
+-----------+--------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

describe tab2;

```
mysql> describe tab2;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| Id         | int(11)      | NO   | PRI | NULL    |       |
| Department | varchar(100) | YES  |     | NULL    |       |
| Semester   | varchar(50)  | YES  |     | NULL    |       |
| Cgpa       | varchar(50)  | NO   |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

## 4. Insert Data

The “insert into” statement is used to insert new records in a table.

**Syntax**: insert into table_name (column1, column2, column3, ...)
values (value1, value2, value3, ...);

**Command:**

insert into tab1(FirstName, LastName, Address, Email) values(‘Md’, ‘Rana’, ‘Mirpur’, ‘aa@gmail.com’);

insert into tab1 values(‘Masud’, ‘Rana’, ‘Rampura’, ‘bb@gmail.com’);

insert into tab1 values(‘Al’, ‘Sakib’, ‘Dhanmondi’, ‘cc@gmail.com’);

insert into tab1 values('Ishan', 'Arefin', 'Banani', 'dd@gmail.com');

insert into tab1 values('Tajrin', 'Ahmed', 'Gulshan', 'ee@gmail.com');

**Note:** "select*from table_name" statement is used to select all data from the table.

**Command:**

select*from tab1;

```
mysql> select*from tab1;
+-----------+----------+-----------+--------------+
| FirstName | LastName | Address   | Email        |
+-----------+----------+-----------+--------------+
| Md        | Rana     | Mirpur    | aa@gmail.com |
| Masud     | Rana     | Rampura   | bb@gmail.com |
| Al        | Sakib    | Dhanmondi | cc@gmail.com |
| Ishan     | Arefin   | Banani    | dd@gmail.com |
| Tajrin    | Ahmed    | Gulshan   | ee@gmail.com |
+-----------+----------+-----------+--------------+
5 rows in set (0.00 sec)
```

insert into tab2(Id,Department,Semester,Cgpa) values('2000121', 'CSE', '12th', '3.50');

insert into tab2 values('20023121', 'EEE', '3th', '3.70');

insert into tab2 values('20023122', 'EEE', '7th', '3.60');

insert into tab2 values('20023142', 'ETE', '5th', '3.90');

insert into tab2 values('20024142', 'BBA', '10th', '2.90');

**Note:** "select*from table_name" statement is used to select all data from the table.

select*from tab2;

```
mysql> select*from tab2;
+----------+------------+----------+------+
| Id       | Department | Semester | Cgpa |
+----------+------------+----------+------+
|  2000121 | CSE        | 12th     | 3.50 |
| 20023121 | EEE        | 3th      | 3.70 |
| 20023122 | EEE        | 7th      | 3.60 |
| 20023142 | ETE        | 5th      | 3.90 |
| 20024142 | BBA        | 10th     | 2.90 |
+----------+------------+----------+------+
5 rows in set (0.00 sec)
```

**Note**: Insert one extra data on the tab2.

**Command**:

insert into tab2(Id,Department,Semester,Cgpa) values(215230,'TEX','8th','3.55');

```
mysql> insert into tab2(Id,Department,Semester,Cgpa) values(215230,'TEX','8th','3.55');
Query OK, 1 row affected (0.00 sec)

mysql> select*from tab2;
+----------+------------+----------+------+
| Id       | Department | Semester | Cgpa |
+----------+------------+----------+------+
|   215230 | TEX        | 8th      | 3.55 |
|  2000121 | CSE        | 12th     | 3.50 |
| 20023121 | EEE        | 3th      | 3.70 |
| 20023122 | EEE        | 7th      | 3.60 |
| 20023142 | ETE        | 5th      | 3.90 |
| 20024142 | BBA        | 10th     | 2.90 |
+----------+------------+----------+------+
6 rows in set (0.00 sec)
```

## 5. Update Data

The “update” statement is used to modify the existing records in a table.

**Syntax:** update table_name
set column1 = value1, column2 = value2, ...
where condition;

**Command:**

update tab2

-> set Semester='9th' where Id=20024142;

```
mysql> update tab2
    -> set Semester='9th' where Id=20024142;
Query OK, 0 rows affected (0.00 sec)
Rows matched: 1  Changed: 0  Warnings: 0

mysql> select*from tab2;
+----------+------------+----------+------+
| Id       | Department | Semester | Cgpa |
+----------+------------+----------+------+
|   215230 | TEX        | 8th      | 3.55 |
|  2000121 | CSE        | 12th     | 3.50 |
| 20023121 | EEE        | 3th      | 3.70 |
| 20023122 | EEE        | 7th      | 3.60 |
| 20023142 | ETE        | 5th      | 3.90 |
| 20024142 | BBA        | 9th      | 2.90 |
+----------+------------+----------+------+
6 rows in set (0.00 sec)
```

## 6. Delete Data

The “delete” statement is used to delete existing records in a table.

**Syntax:** delete from *table_name* where *condition*;

**Command:**

delete from tab2 where Id=215230;

```
mysql> delete from tab2 where Id=215230;
Query OK, 1 row affected (0.00 sec)

mysql> select*from tab2;
+----------+------------+----------+------+
| Id       | Department | Semester | Cgpa |
+----------+------------+----------+------+
|  2000121 | CSE        | 12th     | 3.50 |
| 20023121 | EEE        | 3th      | 3.70 |
| 20023122 | EEE        | 7th      | 3.60 |
| 20023142 | ETE        | 5th      | 3.90 |
| 20024142 | BBA        | 9th      | 2.90 |
+----------+------------+----------+------+
5 rows in set (0.00 sec)
```

## 7. Drop Table

The “drop table” statement is used to drop an existing table in a database.

**Syntax**: drop table table_name;

**Command:**

drop table tab2;

```
mysql> drop table tab2;
Query OK, 0 rows affected (0.55 sec)
```

**Note:** The “show tables” statement is used to show all tables in a database.

**Command:**

show tables;

```
mysql> show tables;
+-------------------+
| Tables_in_student |
+-------------------+
| tab1              |
+-------------------+
1 row in set (0.01 sec)
```