10 MySQL Queries

1 . To Create Database Having Name ‘TEST’

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

Query : **CREATE DATABASE TEST;**

2. Show tables in database

```
mysql> show databases
    -> ;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| bank               |
| mysql              |
| performance_schema |
| sys                |
| test               |
+--------------------+
6 rows in set (0.00 sec)
```

Query : **SHOW DATABASES;**

3. Create Table in database created

```
mysql> USE TEST
Database changed
mysql> CREATE TABLE TEST_TT(SR_NO INT(10) NOT NULL UNIQUE,NAME VARCHAR(100) DEFAULT 'NOT GIVEN',STD INT(100) NOT NULL);

Query OK, 0 rows affected (0.01 sec)
```

Query **: CREATE TABLE TEST_TT(SR_NO INT(10) NOT NULL UNIQUE,NAME VAR(100) DEFAULT 'NOT GIVEN',STD INT(100) NOT NULL);**

4. To get description of table

```
mysql> DESC TEST_TT;
+-------+--------------+------+-----+-----------+-------+
| Field | Type         | Null | Key | Default   | Extra |
+-------+--------------+------+-----+-----------+-------+
| SR_NO | int(10)      | NO   | PRI | NULL      |       |
| NAME  | varchar(100) | YES  |     | NOT GIVEN |       |
| STD   | int(100)     | NO   |     | NULL      |       |
+-------+--------------+------+-----+-----------+-------+
3 rows in set (0.00 sec)
```

Query : **DESC TEST_TT** or **DESCRIBE TEST_TT**

5. To insert values in table

```
mysql> INSERT INTO TEST_TT(SR_NO,NAME,STD) VALUES(1,'JAYDEEP',12);
Query OK, 1 row affected (0.01 sec)
```

Query : **INSERT INTO TEST_TT(SR_NO,NAME,STD) VALUES(1,'JAYDEEP',12);**

6. Getting all values from a table

```
mysql> SELECT * FROM TEST_TT;
+-------+---------+-----+
| SR_NO | NAME    | STD |
+-------+---------+-----+
|     1 | JAYDEEP |  12 |
+-------+---------+-----+
1 row in set (0.00 sec)
```

Query : **SELECT * FROM TEST_TT;**

7. Getting specific values from table using where clause

```
mysql> SELECT * FROM TEST_TT;
+-------+-----------+------+
| SR_NO | NAME      | STD  |
+-------+-----------+------+
|     1 | JAYDEEP   |   12 |
|     2 |           |    1 |
|     3 | Ani       |   11 |
|     4 | Aniket    |  111 |
|     5 | An        | 1311 |
|    12 | NOT GIVEN |    1 |
+-------+-----------+------+
6 rows in set (0.00 sec)
```

```
mysql> SELECT NAME,STD FROM TEST_TT WHERE SR_NO>2;
+-----------+------+
| NAME      | STD  |
+-----------+------+
| Ani       |   11 |
| Aniket    |  111 |
| An        | 1311 |
| NOT GIVEN |    1 |
+-----------+------+
4 rows in set (0.00 sec)
```

Query : **SELECT NAME,STD FROM TEST_TT WHERE SR_NO>2;**

8. Deleting a column from table using Alter Command

```
mysql> ALTER TABLE TEST_TT DROP COLUMN  STD
    -> ;
Query OK, 6 rows affected (0.03 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT * FROM TEST_TT;
+-------+-----------+
| SR_NO | NAME      |
+-------+-----------+
|     1 | JAYDEEP   |
|     2 |           |
|     3 | Ani       |
|     4 | Aniket    |
|     5 | An        |
|    12 | NOT GIVEN |
+-------+-----------+
6 rows in set (0.02 sec)
```

```
mysql> DESC TEST_TT
    -> ;
+-------+--------------+------+-----+-----------+-------+
| Field | Type         | Null | Key | Default   | Extra |
+-------+--------------+------+-----+-----------+-------+
| SR_NO | int(10)      | NO   | PRI | NULL      |       |
| NAME  | varchar(100) | YES  |     | NOT GIVEN |       |
+-------+--------------+------+-----+-----------+-------+
2 rows in set (0.00 sec)
```

Query : **ALTER TABLE TEST_TT DROP COLUMN STD;**

9. Adding a column in table using Alter Command

```
mysql> ALTER TABLE TEST_TT ADD STD VARCHAR(100) DEFAULT '-';
Query OK, 6 rows affected (0.03 sec)
Records: 6  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM TEST_TT;
+-------+-----------+------+
| SR_NO | NAME      | STD  |
+-------+-----------+------+
|     1 | JAYDEEP   | -    |
|     2 |           | -    |
|     3 | Ani       | -    |
|     4 | Aniket    | -    |
|     5 | An        | -    |
|    12 | NOT GIVEN | -    |
+-------+-----------+------+
6 rows in set (0.00 sec)

mysql> DESC TEST_TT;
+-------+--------------+------+-----+-----------+-------+
| Field | Type         | Null | Key | Default   | Extra |
+-------+--------------+------+-----+-----------+-------+
| SR_NO | int(10)      | NO   | PRI | NULL      |       |
| NAME  | varchar(100) | YES  |     | NOT GIVEN |       |
| STD   | varchar(100) | YES  |     | -         |       |
+-------+--------------+------+-----+-----------+-------+
3 rows in set (0.00 sec)
```

Query : **ALTER TABLE TEST_TT ADD STD VARCHAR(100) DEFAULT '-';**

10. Dropping whole database

```
mysql> DROP DATABASE TEST;
Query OK, 1 row affected (0.03 sec)

mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| bank               |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.01 sec)
```

Query : **DROP DATABASE TEST;**

10 Python MySQL Connectivity Programs

1. Creating database

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password=""
)
mycursor = mydb.cursor()
mycursor.execute("CREATE DATABASE mydb_test")
```

Output :

```
mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| bank               |
| mydb_test          |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
6 rows in set (0.00 sec)
```

Database created by running above command

2. Creating Table

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="mydb_test"
)
mycursor = mydb.cursor()
mycursor.execute("CREATE TABLE test_tt (name VARCHAR(255) DEFAULT '-', address
VARCHAR(255))")
```

Output :

```
mysql> USE mydb_test
Database changed
mysql> SHOW TABLES;
+--------------------+
| Tables_in_mydb_test |
+--------------------+
| test_tt            |
+--------------------+
1 row in set (0.00 sec)

mysql> DESC test_tt;
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| name    | varchar(255) | YES  |     | -       |       |
| address | varchar(255) | YES  |     | NULL    |       |
+---------+--------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```

3. Inserting Values

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="mydb_test"
)
mycursor = mydb.cursor()
q = "INSERT INTO test_tt (name, address) VALUES (%s, %s)"
val = ("Jaydeep", "New Road City")
mycursor.execute(q, val)
mydb.commit()
print(mycursor.rowcount, "record inserted.")
```

Output:

```
1 record inserted.
```

```
mysql> SELECT * FROM test_tt;
+---------+---------------+
| name    | address       |
+---------+---------------+
| Jaydeep | New Road City |
+---------+---------------+
1 row in set (0.00 sec)
```

4. Selecting Values from table

```
import mysql.connector
mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="",
  database="mydb_test"
)
mycursor = mydb.cursor()
mycursor.execute("SELECT * FROM test_tt")
myresult = mycursor.fetchall()
for x in myresult:
  print(x)
```

Output :

```
('Jaydeep', 'New Road City')
PS C:\Users\JaySs\Desktop\Class 12 20 Python Program>
```

5. Using where clause for selecting specific data

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="mydb_test"
)
mycursor = mydb.cursor()
q = "SELECT * FROM test_tt WHERE address ='New City'"
mycursor.execute(q)
myresult = mycursor.fetchall()
if len(myresult) == 0:
    print("There is no such value !")
else:
    for x in myresult:
        print(x)
```

Output :

```
py"
There is no such value !
PS C:\Users\JaySs\Desktop\Class 12 20 Python Program>
```

6. Deleting Records from table

```
import mysql.connector
mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="",
  database="mydb_test"
)
mycursor = mydb.cursor()
q = "DELETE FROM test_tt WHERE address = 'New Road City'"
mycursor.execute(q)
mydb.commit()
print(mycursor.rowcount, "record(s) deleted")
```

Output :

```
PS C:\Users\JaySs\Desktop\Class 12 20 Python Program> & "
1 record(s) deleted
PS C:\Users\JaySs\Desktop\Class 12 20 Python Program>
```

```
mysql> SELECT * FROM test_tt;
+---------+---------------+
| name    | address       |
+---------+---------------+
| Jaydeep | New Road City |
+---------+---------------+
1 row in set (0.00 sec)

mysql> SELECT * FROM test_tt;
Empty set (0.00 sec)
```

7. Droping Table from Database

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="mydb_test"
)
mycursor = mydb.cursor()
q = "DROP TABLE test_tt"
mycursor.execute(q)
```

Output:

```
mysql> SHOW TABLES;
+--------------------+
| Tables_in_mydb_test |
+--------------------+
| test_tt            |
+--------------------+
1 row in set (0.00 sec)

mysql> SHOW TABLES;
Empty set (0.00 sec)
```

8. Updating values in table

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="mydb_test"
)
mycursor = mydb.cursor()
q = "UPDATE test_tt SET address = 'No - Add' WHERE address = 'New Road City'"
mycursor.execute(q)
mydb.commit()
print(mycursor.rowcount, "record(s) affected")
```

Output:

```
es.py"
1 record(s) affected
PS C:\Users\JaySs\Desktop\Class 12 20 Python Program>
```

```
mysql> SELECT * FROM test_tt;
+---------+---------------+
| name    | address       |
+---------+---------------+
| Jaydeep | New Road City |
+---------+---------------+
1 row in set (0.00 sec)

mysql> SELECT * FROM test_tt;
+---------+----------+
| name    | address  |
+---------+----------+
| Jaydeep | No - Add |
+---------+----------+
1 row in set (0.00 sec)
```

9. Adding Column using alter command

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="mydb_test"
)
mycursor = mydb.cursor()
q = "ALTER TABLE test_tt ADD Phone VARCHAR(100) DEFAULT '-'"
mycursor.execute(q)
mydb.commit()
```

Output :

```
mysql> DESC test_tt;
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| name    | varchar(255) | YES  |     | -       |       |
| address | varchar(255) | YES  |     | NULL    |       |
+---------+--------------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> DESC test_tt;
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| name    | varchar(255) | YES  |     | -       |       |
| address | varchar(255) | YES  |     | NULL    |       |
| Phone   | varchar(100) | YES  |     | -       |       |
+---------+--------------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

10. Deleting Column Using Alter Command

```
import mysql.connector
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="mydb_test")
mycursor = mydb.cursor()
q = "ALTER TABLE test_tt DROP COLUMN  Phone"
mycursor.execute(q)
mydb.commit()
```

Output :

```
mysql> DESC test_tt;
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| name    | varchar(255) | YES  |     | -       |       |
| address | varchar(255) | YES  |     | NULL    |       |
| Phone   | varchar(100) | YES  |     | -       |       |
+---------+--------------+------+-----+---------+-------+
3 rows in set (0.01 sec)

mysql> DESC test_tt;
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| name    | varchar(255) | YES  |     | -       |       |
| address | varchar(255) | YES  |     | NULL    |       |
+---------+--------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```