Aim: To view records in the table "Student".

Code:

```
import mysql.connector as sqltor
mycon = sqltor.connect(host='localhost', user = 'root', passwd = 'root')
cursor = mycon.cursor()
cursor.execute('use db2')

cursor.execute('select * from student')
data = cursor.fetchall()
count = cursor.rowcount
for row in data:
    print(row)
print(count, 'rows in table')
```

Output (Python):

```
= RESTART: C:\Users\Gary\Documents\MySQL Python connectivity\1. TO VIEW RECORDS.py
(1, 'Raj', 11)
(2, 'Rahul', 12)
(3, 'Karan', 12)
(4, 'Kabir', 10)
(5, 'Neeraj', 11)
(6, 'Nikhil', 10)
(7, 'Rajeev', 11)
(8, 'Naveen', 10)
8 rows in table
```

Output (MySQL):

```
mysql> select * from Student;
 RNo | Name
               | Std
       Raj
                   11
        Rahul
    2
       Karan
                   12
        Kabir
                   10
    5
        Neeraj
                   11
        Nikhil
                   10
        Rajeev
                   11
                   10
        Naveen
 rows in set (0.00 sec)
```

Aim: To insert a record in the table "Student".

Code:

```
1 import mysql.connector as sqltor
2 mycon = sqltor.connect(host='localhost', user = 'root', passwd = 'root')
3 cursor = mycon.cursor()
4 cursor.execute('use db2')
6 ch = 'y'
7 while ch == 'y':
    print('Enter student details below:')
     no = eval(input('Roll No.: '))
10 name = input('Name: ')
11 std = input('Std: ')
   cursor.execute("insert into student value({},'{}',{})".format(no, name, std))
12
13
    mycon.commit()
    print('Record added successfully')
14
    ch = input('Want to enter more? (y/n): ')
15
16
```

= RESTART: C:\Users\Gary\Documents\MySQL Python connectivity\2. TO ADD RECORDS.py

Enter student details below:

Roll No.: 9 Name: Tarun

Std: 11

Record added successfully Want to enter more? (y/n): y Enter student details below:

Roll No.: 10 Name: Rakesh

Std: 11

Record added successfully Want to enter more? (y/n): n

Result:

```
mysql> select * from Student;
| RNo | Name
                Std
    1 | Raj
                   11 |
    2 | Rahul
                   12 |
    3 | Karan
                   12 |
    4 | Kabir
                   10 |
    5 Neeraj
                   11 |
    6 | Nikhil
                   10 l
    7 | Rajeev
                   11 |
    8 | Naveen
                   10 |
    9 | Tarun
                   11 |
   10 | Rakesh |
                   11 |
10 rows in set (0.00 sec)
```

Aim: To update a record in the table "Student".

Code:

```
1 import mysql.connector as sqltor
2 mycon = sqltor.connect(host='localhost', user = 'root', passwd = 'root')
3 cursor = mycon.cursor()
4 cursor.execute('use db2')
6 no = eval(input('Enter RNo of student to update: '))
7 cursor.execute('select * from student where rno={}'.format(no))
8 for rec in cursor:
9 print(rec)
10 cursor.execute('describe student')
11 for colname in cursor:
     print(colname[0])
13 field = input('Enter field you want to update: ')
14 val = input('Enter the new value: ')
15 cursor.execute("update student set {}='{}' where rno={}".format(field, val, no))
16 mycon.commit()
17 print('Record updated successfully')
18
```

= RESTART: C:\Users\Gary\Documents\MySQL Python connectivity\3. TO UPDATE RECORDS.py Enter RNo of student to update: 1

(1, 'Raj', 11)

RNo

Name

Std

Enter field you want to update: Name

Enter the new value: Sachin Record updated successfully

Result:

```
mysql> select * from Student;
| RNo | Name
               Std
    1 | Sachin |
                   11 |
       Rahul
    2 |
                   12
    3 | Karan
                   12
    4 | Kabir
                   10
    5 | Neeraj
                   11 |
    6 | Nikhil
                   10
    7 | Rajeev
                   11 |
    8 | Naveen |
                   10
    9
      | Tarun
                   11 |
   10 | Rakesh |
                   11 |
10 rows in set (0.00 sec)
```

Aim: To delete a record from the table "Student".

Input:

```
1 import mysql.connector as sqltor
2 mycon = sqltor.connect(host='localhost', user = 'root', passwd = 'root')
3 cursor = mycon.cursor()
4 cursor.execute('use db2')
6 no = eval(input('Enter RNo. of student you want to remove: '))
7 cursor.execute("select * from student where rno={}".format(no))
8 for rec in cursor:
    print(rec)
10 ch = input('Are you sure you want to remove this student? (y/n): ')
11 if ch == 'y':
    cursor.execute('delete from student where rno={}'.format(no))
12
    mycon.commit()
13
    print('Record removed successfully')
14
15
```

= RESTART: C:\Users\Gary\Documents\MySQL Python connectivity\4. TO DELETE RECORDS.py Enter RNo. of student you want to remove: 10 (10, 'Rakesh', 11)

Are you sure you want to remove this student? (y/n): y

Record removed successfully

Result:

```
mysql> select * from Student;
| RNo | Name
               | Std
    1 | Sachin |
                   11 |
   2 | Rahul
                   12
    3 | Karan
                   12 |
   4 | Kabir
                   10 |
    5 | Neeraj
                   11 |
    6 | Nikhil |
                   10 |
    7 | Rajeev |
                   11 |
   8 | Naveen |
                   10 |
    9 | Tarun
                   11 |
9 rows in set (0.00 sec)
```

Aim: Make a script to operate on the table "Student" using a CUI menu.

Input:

```
🚂 5. BASIC OPERATIONS ON TABLE.py - C:\Users\Gary\Documents\MySQL Python connectivity\5. BASIC OPERATIONS ON TABLE.py (3.11.4)
File Edit Format Run Options Window Help
 1 import mysql.connector as sqltor
 2 mycon = sqltor.connect(host='localhost', user = 'root', passwd = 'root')
 3 cursor = mycon.cursor()
 4 cursor.execute('use db2')
 6 def checkconnect():
     if mycon.is_connected():
        print('MySQL is connected')
10
        print('MySQL is not connected')
12 def viewrec():
     cursor.execute('select * from student')
     data = cursor.fetchall()
     count = cursor.rowcount
     for row in data:
17
        print(row)
18
     print(count, 'rows in table')
20 def insertrec():
21 ch = 'y'
22
     while ch == 'y':
23
        print('Enter student details below:')
24
        no = eval(input('Roll No.: '))
25
        name = input('Name: ')
26
        std = input('Grade: ')
        cursor.execute("insert into student value({},'{}',{}})".format(no, name, std))
27
28
        mycon.commit()
29
        print('Record added successfully')
30
        ch = input('Want to enter more? (y/n): ')
31
33 no = eval(input('Enter RNo of student to update: '))
     cursor.execute('select * from student where rno={}'.format(no))
     for rec in cursor:
37
     cursor.execute('describe student')
38 for colname in cursor:
```

```
39
       print(colname[0])
40
     field = input('Enter field you want to update: ')
41
     val = input('Enter the new value: ')
     cursor.execute("update student set {}='{}' where rno={}".format(field, val, no))
42
43
     mycon.commit()
44
     print('Record updated successfully')
45
46 def deleterec():
     no = eval(input('Enter RNo. of student you want to remove: '))
48
     cursor.execute("select * from student where rno={}".format(no))
49
     for rec in cursor:
50
       print(rec)
51
     ch = input('Are you sure you want to remove this student? (y/n): ')
52
     if ch == 'y':
       cursor.execute('delete from student where rno={}'.format(no))
53
54
       mycon.commit()
55
       print('Record removed successfully')
56
57 #MENU
58 mc='y'
59 while mc=='y':
60 print('=======')
     print('MySQL Operations')
     print('=======')
62
     print('1. Check Connection with MySQL')
63
     print('2. View records')
64
     print('3. Insert records')
65
66
     print('4. Update records')
67
     print('5. Delete records')
68
     print('======')
69
     ch = int(input('Enter choice (1-5): '))
70
     if ch == 1:
71
       checkconnect()
72
     elif ch == 2:
       viewrec()
73
     elif ch == 3:
74
75
       insertrec()
76
     elif ch == 4:
77
       updaterec()
78
     elif ch == 5:
79
       deleterec()
80
     else:
       print('Invalid choice')
81
82
     mc=input('Want to perform more operations? (y/n): ')
83 else:
84
     print('See you soon!')
85
```

= RESTART: C:\Users\Gary\Documents\MySQL Python connectivity\5. BASIC OPERATIONS ON TABLE.py	
MySQL Operations	
1. Check Connection with MySQL 2. View records 3. Insert records 4. Update records 5. Delete records	
Enter choice (1-5): 1 MySQL is connected Want to perform more operations? (y/n): y	
4. Update records 5. Delete records	
Enter choice (1-5): 2 (1, 'Sachin', 11) (2, 'Rahul', 12) (3, 'Karan', 12) (4, 'Kabir', 10) (5, 'Neeraj', 11) (6, 'Nikhil', 10) (7, 'Rajeev', 11) (8, 'Naveen', 10) (9, 'Tarun', 11) 9 rows in table Want to perform more operations? (y/n): y	
MySQL Operations	
1. Check Connection with MySQL	
2. View records 3. Insert records 4. Update records 5. Delete records	
Enter choice (1-5): 3 Enter student details below: Roll No.: 10 Name: Rakesh Grade: 11	
Record added successfully Want to enter more? (y/n): n Want to perform more operations? (y/n): y ====================================	
1. Check Connection with MySQL 2. View records 3. Insert records	

4. Update records 5. Delete records _____ Enter choice (1-5): 4 Enter RNo of student to update: 5 (5, 'Neeraj', 11) RNo Name Std Enter field you want to update: Std Enter the new value: 10 Record updated successfully Want to perform more operations? (y/n): y _____ MySQL Operations _____ 1. Check Connection with MySQL 2. View records 3. Insert records 4. Update records 5. Delete records _____ Enter choice (1-5): 5 Enter RNo. of student you want to remove: 10 (10, 'Rakesh', 11) Are you sure you want to remove this student? (y/n): y Record removed successfully Want to perform more operations? (y/n): n See you soon!