PRACTICAL – 5

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  |
+-----+--------+------+
|   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 set (0.00 sec)
```

PRACTICAL – 6

Aim: To insert a record 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')

ch = 'y'
while ch == 'y':
    print('Enter student details below:')
    no = eval(input('Roll No.: '))
    name = input('Name: ')
    std = input('Std: ')
    cursor.execute("insert into student value({},'{}',{})".format(no, name, std))
    mycon.commit()
    print('Record added successfully')
    ch = input('Want to enter more? (y/n): ')

```

Output:

```
= 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 |
|   7 | Rajeev |   11 |
|   8 | Naveen |   10 |
|   9 | Tarun  |   11 |
|  10 | Rakesh |   11 |
+-----+--------+------+
10 rows in set (0.00 sec)
```

PRACTICAL – 7

Aim: To update a record 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')

no = eval(input('Enter RNo of student to update: '))
cursor.execute('select * from student where rno={}'.format(no))
for rec in cursor:
    print(rec)
cursor.execute('describe student')
for colname in cursor:
    print(colname[0])
field = input('Enter field you want to update: ')
val = input('Enter the new value: ')
cursor.execute("update student set {}='{}' where rno={}".format(field, val, no))
mycon.commit()
print('Record updated successfully')

```

Output:

```
= 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 |
|   2 | Rahul  |   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)
```

PRACTICAL – 8

Aim: To delete a record from the table “Student”.

Input:

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

no = eval(input('Enter RNo. of student you want to remove: '))
cursor.execute("select * from student where rno={}".format(no))
for rec in cursor:
    print(rec)
ch = input('Are you sure you want to remove this student? (y/n): ')
if ch == 'y':
    cursor.execute('delete from student where rno={}'.format(no))
    mycon.commit()
    print('Record removed successfully')

```

Output:

= 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)
```

PRACTICAL – 9

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

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

def checkconnect():
    if mycon.is_connected():
        print('MySQL is connected')
    else:
        print('MySQL is not connected')

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

def insertrec():
    ch = 'y'
    while ch == 'y':
        print('Enter student details below:')
        no = eval(input('Roll No.: '))
        name = input('Name: ')
        std = input('Grade: ')
        cursor.execute("insert into student value({},'{}',{})".format(no, name, std))
        mycon.commit()
        print('Record added successfully')
        ch = input('Want to enter more? (y/n): ')

def updaterec():
    no = eval(input('Enter RNo of student to update: '))
    cursor.execute('select * from student where rno={}'.format(no))
    for rec in cursor:
        print(rec)
    cursor.execute('describe student')
    for colname in cursor:
```

```
        print(colname[0])
    field = input('Enter field you want to update: ')
    val = input('Enter the new value: ')
    cursor.execute("update student set {}='{}' where rno={}".format(field, val, no))
    mycon.commit()
    print('Record updated successfully')

def deleterec():
    no = eval(input('Enter RNo. of student you want to remove: '))
    cursor.execute("select * from student where rno={}".format(no))
    for rec in cursor:
        print(rec)
    ch = input('Are you sure you want to remove this student? (y/n): ')
    if ch == 'y':
        cursor.execute('delete from student where rno={}'.format(no))
        mycon.commit()
        print('Record removed successfully')


#MENU
mc='y'
while mc=='y':
    print('==================================')
    print('MySQL Operations')
    print('==================================')
    print('1. Check Connection with MySQL')
    print('2. View records')
    print('3. Insert records')
    print('4. Update records')
    print('5. Delete records')
    print('==================================')
    ch = int(input('Enter choice (1-5): '))
    if ch == 1:
        checkconnect()
    elif ch == 2:
        viewrec()
    elif ch == 3:
        insertrec()

    elif ch == 4:
        updaterec()
    elif ch == 5:
        deleterec()
    else:
        print('Invalid choice')
    mc=input('Want to perform more operations? (y/n): ')
else:
    print('See you soon!')

```

Output:

```
= 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
==================================
MySQL Operations
==================================
1. Check Connection with MySQL
2. View records
3. Insert records
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
==================================
MySQL Operations
==================================
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!
```