Practical No 6

Aim : Write A Program To Implement Various Database Action In MySQL Using Python

A. MySQL Database Connection in python

```
import mysql.connector

mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="root"
)

print(mydb)
```

```
= RESTART: C:\MyWork\CS-Sem-2\advancedPython\Practical Code\practical6\dbConnect.py
<mysql.connector.connection  cext.CMySQLConnection object at 0x00000297CF8D4890>
```

B. Inserting Data In Database

```
import mysql.connector

mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="root",
  database = "Company"
)

cursor = mydb.cursor()

cursor.execute("INSERT INTO Employee value( 9, 'John Doe', 105, 72000.00, 4)")
cursor.execute("INSERT INTO Employee value( 10, 'Jane Doe', 105, 72000.00, 4)")
cursor.execute("INSERT INTO Employee value( 11, 'abcd Doe', 105, 72000.00, 5)")

print(cursor.rowcount,"record(s)affected")
mydb.commit()
```

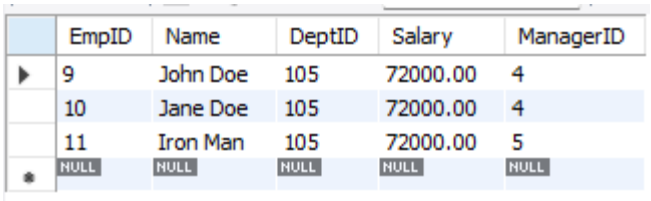
```
1 record(s)affected
```

EmpID	Name	DeptID	Salary	ManagerID
9	John Doe	105	72000.00	4
10	Jane Doe	105	72000.00	4
11	abcd Doe	105	72000.00	5
NULL	NULL	NULL	NULL	NULL

C. Updating Data In Database

```
import mysql.connector

mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="root",
  database = "Company"
)

cursor = mydb.cursor()

cursor.execute("update Employee set Name='Iron Man' where EmpID =11 ")

print(cursor.rowcount,"record(s)affected")
mydb.commit()
```

```
1 record(s)affected
```

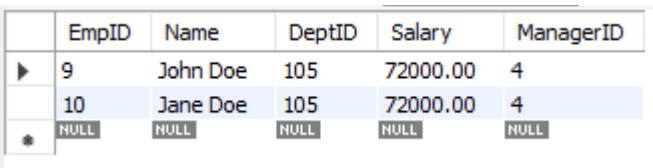


EmpID	Name	DeptID	Salary	ManagerID
9	John Doe	105	72000.00	4
10	Jane Doe	105	72000.00	4
11	Iron Man	105	72000.00	5
NULL	NULL	NULL	NULL	NULL

D. Delete Data In Database

```
import mysql.connector

mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="root",
  database = "Company"
)

cursor = mydb.cursor()

cursor.execute("delete from Employee where EmpID =11 ")

print(cursor.rowcount,"record(s)affected")
mydb.commit()
```

```
1 record(s)affected
```



EmpID	Name	DeptID	Salary	ManagerID
9	John Doe	105	72000.00	4
10	Jane Doe	105	72000.00	4
NULL	NULL	NULL	NULL	NULL

E. Fetching Data From Database

1. Fetch One

```
import mysql.connector

mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="root",
  database = "Company"
)
cursor = mydb.cursor()
cursor.execute("select * from Employee;")

dataOne = cursor.fetchone()
print(dataOne)
```

```
(9, 'John Doe', 105, Decimal('72000.00'), 4)
```

2. Fetch Many

```
import mysql.connector

mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="root",
  database = "Company"
)
cursor = mydb.cursor()
cursor.execute("select * from Employee;")

# Fetch Many
dataMany = cursor.fetchmany(3)
for data in dataMany:
    print(data)
```

```
(2, 'John Doe', 105, Decimal('72000.00'), 4)
(5, 'Jane Doe', 105, Decimal('72000.00'), 4)
(7, 'abcd Doe', 105, Decimal('72000.00'), 5)
```

3. Fetch All

```
import mysql.connector

mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="root",
  database = "Company"
)
cursor = mydb.cursor()
cursor.execute("select * from Employee;")

dataAll = cursor.fetchall()
for data in dataAll:
    print(data)
```

```
(2, 'John Doe', 105, Decimal('72000.00'), 4)
(5, 'Jane Doe', 105, Decimal('72000.00'), 4)
(7, 'abcd Doe', 105, Decimal('72000.00'), 5)
(9, 'John Doe', 105, Decimal('72000.00'), 4)
(10, 'Jane Doe', 105, Decimal('72000.00'), 4)
```