CLASS NOTES	
Class: XII	**Date: 08-102-2021**
Subject: **Informatics Practices**	**Topic: Additional Notes on Project**

Project Contents:

#To check for all the databases, present in MySQL using Python

```
import mysql.connector

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

mycursor = mydb.cursor()

mycursor.execute("SHOW  DATABASES")

for x in mycursor:

   print(x)
```

#To Create a Database Table:

```
import mysql.connector

mydb = mysql.connector.connect(host='localhost',user='root',passwd='opjs',  database='school')

mycursor = mydb.cursor()

mycursor.execute("CREATE  table students1(rollno  int(2), name varchar(10), age int(2), marks decimal(5,2), city varchar(20))")
```

#To modify table student (adding a new column) in

#MySQL using Python Interface

```
import mysql.connector

mydb = mysql.connector.connect(host="localhost",\

                    user="root",\

                    passwd="opjs",\

                    database="ajay")

mycursor = mydb.cursor()

mycursor.execute("Alter  table students add(marks2 decimal(5,2))")
```

#To view the modified structure of table student in

#MySQL using Python Interface

```
import mysql.connector

mydb = mysql.connector.connect(host="localhost",\
```

```
                    user="root",\
                    passwd="opjs",\
                    database="school")
mycursor = mydb.cursor()
mycursor.execute("Desc  students1")
for x in mycursor:
  print(x)
```

#Menu-driven program to demonstrate FIVE major operations

```
#performed on a table through MySQL-Python connectivity
def menu():
  c='y'
  while (c=='y'):
    print ("1. add record")
    print ("2. update record ")
    print ("3. delete record")
    print("4. display records")
    print ("5. display graph")
    print("6. Exiting")
    choice=int(input("Enter your choice: "))
    if choice == 1:
      adddata()
    elif choice== 2:
      updatedata()
    elif choice== 3:
      deldata()
    elif choice== 4:
      fetchdata()
    elif choice==5:
      graph()
    elif choice == 6:
```

```
        print("Exiting")
        break
    else:
        print("wrong input")
c=input("Do you want to continue or not: ")
def fetchdata():
    import mysql.connector
    try:
        mydb = mysql.connector.connect(host="localhost",user="root",passwd="opjs",database="ajay")
        mycursor = mydb.cursor()
        mycursor.execute("Select * from students")
        myrecords = mycursor.fetchall()
        for x in myrecords:
            print(x)
    except:
        print ("Error: unable to fetch data")

def adddata():
    try:
        import mysql.connector
        mydb = mysql.connector.connect(host="localhost",user="root",passwd="opjs",database="ajay")
        mycursor = mydb.cursor()
        mycursor.execute("INSERT INTO students VALUES(2,'Pooja',21, 'VI','A', 'Pending',390,320)")
        mycursor.execute("INSERT INTO students VALUES(3,'Radhika',18, 'VII','B','Evaluated',388,450)")
        mycursor.execute("INSERT INTO students VALUES(4,'Sonia',24,'X','D', 'Pending',300,544)")
        mycursor.execute("INSERT INTO students VALUES(5,'Vinay',25,'XI','C','Evaluated',410,345)")
        mycursor.execute("INSERT INTO students VALUES(10,'Shaurya',15,'X','C','Evaluated',345,560)")

        mydb.commit()
    except Exception as e:
        print(e)
```

```
def deldata():
    try:
        import mysql.connector
        mydb = mysql.connector.connect(host="localhost",user="root",passwd="opjs",database="ajay")
        mycursor = mydb.cursor()
        rno= int(input("Input the rollno to delete the record:"))
        qry="DELETE FROM students where Rollno = %s;" %(rno,)
        mycursor.execute(qry)
        mydb.commit()
        print(mycursor.rowcount,"Record (s) Deleted")
    except Exception as e:
        print(e)
def updatedata():
    try:
        import mysql.connector
        mydb = mysql.connector.connect(host="localhost",user="root",passwd="opjs",database="ajay")
        mycursor = mydb.cursor()
        mks=float(input("Input the marks to update:"))
        nm=input("Input the name for marks will be changed")
        qry="UPDATE students set marks1 = %s where Name = '%s';"%(mks,nm)
        mycursor.execute(qry)
        mydb.commit()
        print(mycursor.rowcount,"Record (s) Updated")
    except Exception as e:
        print(e)
def graph():
    try:
        import mysql.connector
        import pandas as pd
        import matplotlib.pyplot as plt
```

```
        mydb = mysql.connector.connect(host="localhost",user="root",passwd="opjs",database="ajay")
        qry="Select name,marks1 from students;"
        df=pd.read_sql(qry, mydb)
        print(df)
        plt.bar(df['name'],df['marks1'])
        plt.show()
    except Exception as e:
        print(e)
menu()
```