Full Stack Application Development with Cloud Computing

Module 3 - Back-End Development & Integration

Lab - 2

Unit 3 – Data Persistence and Database Integration

Topic: Python - MYSQL Connector

Ex. 1: To create an employee management system using Python and MySQL

Step 1) Download and install MySQL8

https://dev.mysql.com/downloads/windows/installer/8.0.html

Step 2) Run MySQL workbench

Step 3) Open the command line terminal

   >cmd

Step 4) Install MySQL connector

>python -m pip install mysql-connector-python

Step 5) Test mysql connector

>import mysql.connector

Step 6) Create a .py file and write code and execute the respective .py file   from the command line

cmd

cd desktop

python filename.py

//Create Database

```python
import mysql.connector
mydb = mysql.connector.connect(
  host="localhost",
  user="root",
  password="Yogesh786@"
)
mycursor = mydb.cursor()
mycursor.execute("CREATE DATABASE mydatabase")
print(mydb)
```

//Create table
```python
mycursor.execute("CREATE TABLE customers (name VARCHAR(255), address VARCHAR(255))")
```

//Insert employees

```python
sql = "INSERT INTO customers (name, address) VALUES (%s, %s)"
val = ("John", "Highway 21")
mycursor.execute(sql, val)
mydb.commit()
print(mycursor.rowcount, "record inserted.")
```

//Display employees
```python
mycursor.execute("SELECT * FROM customers")
myresult = mycursor.fetchall()
for x in myresult:
  print(x)
```

//Display name of employees
```python
mycursor.execute("SELECT name FROM customers")
myresult = mycursor.fetchall()
for x in myresult:
  print(x)
```

//Delete employees
```python
sql = "DELETE FROM customers WHERE address = 'Highway 21'"
mycursor.execute(sql)
mydb.commit()
print(mycursor.rowcount, "record(s) deleted")
```

Practice Question

Ex. 2: To create a library management system using Python and MySQL and perform CURD operations