**24BCP128 Panav Brijesh Patel**

**Experiment-1**

**Title:** Dataset creation and updating using File Handling Program

**Objective:** How to store and retrieve dataset in table format using file handling programming

**Aim**: To create and update a dataset using a file handling program and import it into MySQL database.

**Theory**: File handling allows us to read and write data into files. We can use Python/Java/C/C++ to create and update text or CSV files, which can then be imported into a MySQL table using the `LOAD DATA INFILE` command.

**Code:**

def add\_student():

    print("Enter the details of student in the format (Roll no.,Name,Age,Department)=")

    with open("data.txt","r") as f:

        data=f.read()

    with open ("data.txt","a") as f:

        a=[input() for i in range (0,4)]

        if a[0] in data:

            print("Roll no. already exists")

            c=int(input("Do you want to enter student (0(No)/1(Yes))="))

            if(c==1):

                add\_student()

            else:

                return 0

        else:

            f.write("\n")

            f.write(",".join(a))

            f.flush()

            d=int(input("Do you want to enter student (0(No)/1(Yes))="))

            if(d==1):

                add\_student()

            else:

                return 0

def read():

    print("Roll no.    Name      Age     Department")

    with open("data.txt", "r") as f:

        while True:

            q = f.readline()

            if q == "":

                break

            r = q.strip().split(",")

            for i in r:

                print(i, end="   ")

            print()

def search():

    b2=input("Enter the roll no. that you want to search=")

    with open("data.txt","r") as f:

        while(1):

            a2=f.readline()

            if (b2 in a2):

               r2=a2.replace(",","  ")

               print(f"Yes the record exits = {r2}")

               return 0

def update():

    b=input("Enter the roll no. whose data you want to update=")

    b2=input("Enter the details of student again in format(Roll no,Name,Age,Department) seperating it with (,)")

    with open("data.txt","r") as f:

        lines=f.readlines()

    for i in range(len(lines)):

        if b in lines[i]:

            lines[i]=lines[i].replace(lines[i],b2)

    with open("data.txt","w") as f:

       f.writelines(lines)

def delete():

    b=input("Enter the roll no. whose details you want to delete=")

    with open("data.txt","r") as f:

        lines=f.readlines()

    for i in range(len(lines)):

       if b in lines[i]:

          del lines[i]

    with open("data.txt","w") as f:

       f.writelines(lines)

while(1):

  print("Enter for number given choice: \n 1.Add a student record  \n 2.View all records \n 3.Search a record by roll no. \n 4.Update a record \n 5.Delete a record \n 6.Exit")

  b=int(input())

  match b:

    case 1:

      add\_student()

    case 2:

      read()

    case 3:

      search()

    case 4:

      update()

    case 5:

      delete()

    case 6:

      exit()

**Output:**

A computer screen shot of a black screen

AI-generated content may be incorrect.

**Experiement-2**

**Title**: DDL (Data Definition Language) commands

**Objective**: To understand the concept of designing issues related to the database with creating, populating the tables.

**Aim**: To use various DDL commands like CREATE, ALTER, and DROP.

**Theory**: DDL commands are used to define the database structure or schema. They do not manipulate data but affect table definitions and structures.

**Code and Output exercise wise:**

**Exercise-1:**

**Code and Output:**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Code and Output:A screenshot of a computer program

AI-generated content may be incorrect.**

**Code and Output:**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Exercise-2**

**a)** **A screenshot of a computer

AI-generated content may be incorrect.**

**b) A screenshot of a computer screen

AI-generated content may be incorrect.**

**c)**

A screenshot of a computer

AI-generated content may be incorrect.