ASSIGNMENT	Graphical user interface(GUI)	REG. NO
09-05-2021		URK20CS2077

1. Graphical user interface(GUI) design with database connectivity

AIM: To design GUI with database connectivity.

ALGORITHM:

Step 1: First we have to import the required modules.
Step 2: Give the dimensions, title and background color using config(), geometry() method.
Step 3: Now we create a database connection and cursor object.
Step 4: After we connect to the database, now we have to create an interface where we can insert, select and update the database.
Step 5: First we arrange the widgets in an order. Next we create three buttons i.e. Insert, Select, Update. Where each having functions to perform.
Step 6: Now run the program.

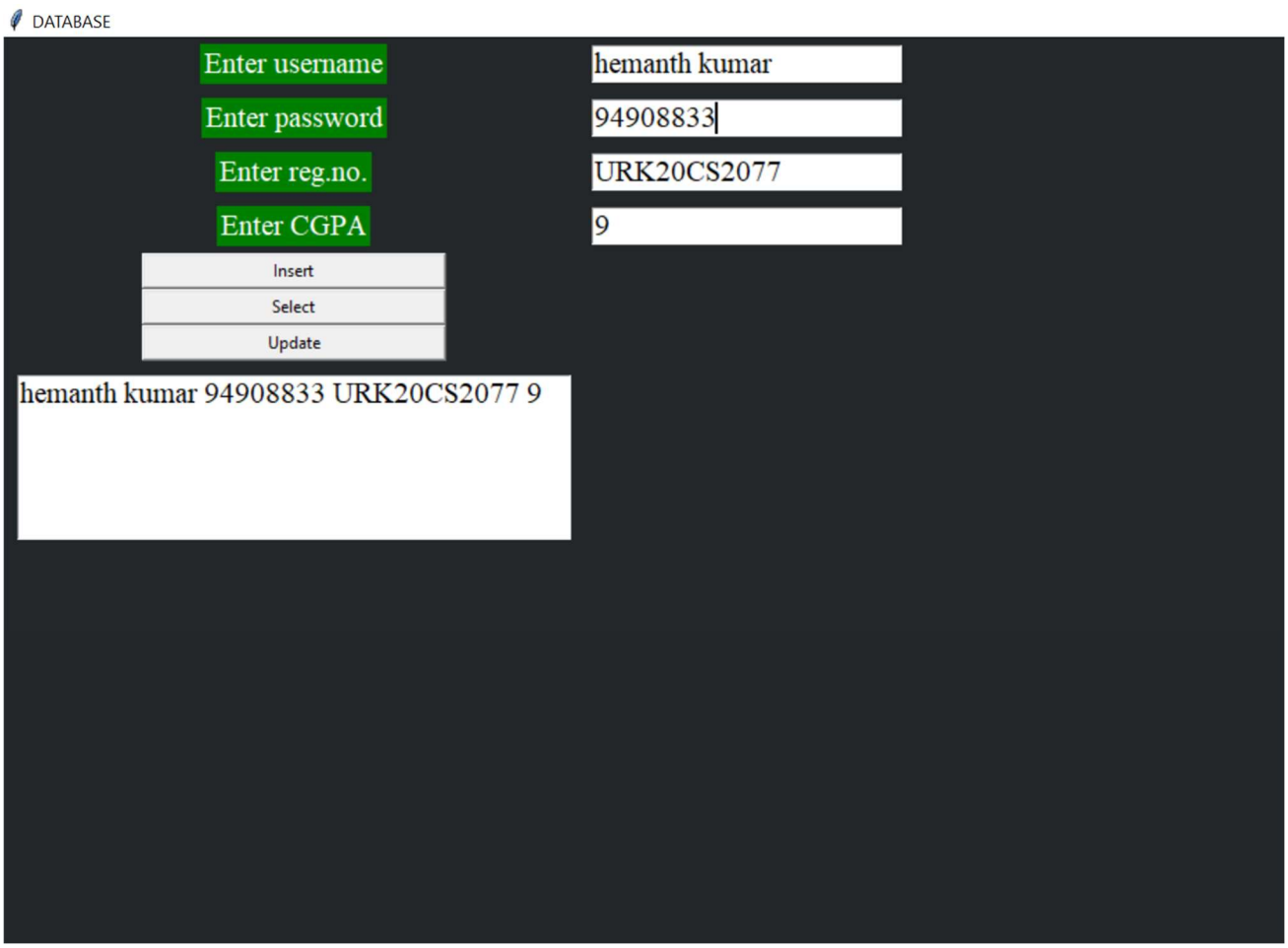
PROGRAM:

```
from tkinter import *
import tkinter as tk
from tkinter import messagebox
import pymysql
data_base = pymysql.connect(host='localhost', user='root',
passwd='',database='chidhu')
cursor = data_base.cursor()
window = Tk()
window.geometry("700x400")
window.title("DATABASE")
window.config(background='#23272a')
label_1 = Label(window, text="Enter username", fg='white',
bg='green',font=("Times new roman", 16))
label_1.grid(row=1, column=1, padx=5, pady=5)
type_1 = StringVar()
entry_1 = Entry(window, textvariable=type_1, font=("Times new roman", 16))
entry_1.grid(row=1, column=2, padx=5, pady=5)
label_2 = Label(window, text="Enter password", fg='white',
bg='green',font=("Times new roman", 16))
label_2.grid(row=2, column=1, padx=5, pady=5)
type_2 = StringVar()
entry_2 = Entry(window, textvariable=type_2, font=("Times new roman", 16))
entry_2.grid(row=2, column=2, padx=5, pady=5)
label_3 = Label(window, text="Enter reg.no.", fg='white', bg='green',font=("Times
new roman", 16))
label_3.grid(row=3, column=1, padx=5, pady=5)
type_3 = StringVar()
entry_3 = Entry(window, textvariable=type_3, font=("Times new roman", 16))
entry_3.grid(row=3, column=2, padx=5, pady=5)
label_4 = Label(window, text="Enter CGPA", fg='white', bg='green',font=("Times
new roman", 16))
```

```
label_4.grid(row=4, column=1, padx=5, pady=5)
type_4 = IntVar()
entry_4 = Entry(window, textvariable=type_4, font=("Times new roman", 16))
entry_4.grid(row=4, column=2, padx=5, pady=5)
def insert():
    a = type_1.get()
    b = type_2.get()
    c = type_3.get()
    d = type_4.get()
    data = (a, b, c, d)
    query = "insert into table2 values(%s, %s, %s, %s)"
    cursor.execute(query, data)
    data_base.commit()
    messagebox.showinfo(title='SUCCESS', message='ADDED SUCCESSFULLY!!')
button_1 = Button(window, text='Insert', command=insert, width=30)
button_1.grid(row=5, column=1)
def select():
    query = "select * from table2"
    cursor.execute(query)
    inside_data = cursor.fetchall()
    l3.delete("1.0", "end")
    for i in inside_data:
        for j in i:
            l3.insert(tk.END, j)
            l3.insert(tk.END, " ")
            print(j, end=' ')
        l3.insert(tk.END, "\n")
        print()
button_2 = Button(window, text='Select', command=select, width=30)
button_2.grid(row=6, column=1)
def update():
    a = type_1.get()
    b = type_2.get()
    query = "update table2 set PASSWORD='" + b + "'where NAME='" + a + "'"
    result = cursor.execute(query)
    data_base.commit()
    messagebox.showinfo(title='SUCCESS', message='Database has been updated')
button_3 = Button(window, text='Update', command=update, width=30)
button_3.grid(row=7, column=1)
l3 = Text(window, font=("Times new roman", 16), width=36, height=5)
l3.grid(row=8, column=1, padx=10, pady=10)
window.mainloop()
```

OUTPUT:

INSERT:



RESULT:

The program has been executed successfully.