2274802010600

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Bai Tap 2

import tkinter as tk

from tkinter import messagebox

import psycopg2

from psycopg2 import sql

class DatabaseApp:

    def \_\_init\_\_(self, root):

        self.root = root

        self.root.title("Database App")

        # Database connection fields

        self.db\_name = tk.StringVar(value='dbtest')

        self.user = tk.StringVar(value='postgres')

        self.password = tk.StringVar(value='131206')

        self.host = tk.StringVar(value='localhost')

        self.port = tk.StringVar(value='5432')

        self.table\_name = tk.StringVar(value='sinhvien')

        # Self connect

        self.connect\_db()

        # Create the GUI elements

        self.create\_widgets()

    def create\_widgets(self):

        # Connection section

        connection\_frame = tk.Frame(self.root)

        connection\_frame.pack(pady=10)

        tk.Label(connection\_frame, text="DB Name:").grid(row=0, column=0, padx=5, pady=5)

        tk.Entry(connection\_frame, textvariable=self.db\_name).grid(row=0, column=1, padx=5, pady=5)

        tk.Label(connection\_frame, text="User:").grid(row=1, column=0, padx=5, pady=5)

        tk.Entry(connection\_frame, textvariable=self.user).grid(row=1, column=1, padx=5, pady=5)

        tk.Label(connection\_frame, text="Password:").grid(row=2, column=0, padx=5, pady=5)

        tk.Entry(connection\_frame, textvariable=self.password, show="\*").grid(row=2, column=1, padx=5, pady=5)

        tk.Label(connection\_frame, text="Host:").grid(row=3, column=0, padx=5, pady=5)

        tk.Entry(connection\_frame, textvariable=self.host).grid(row=3, column=1, padx=5, pady=5)

        tk.Label(connection\_frame, text="Port:").grid(row=4, column=0, padx=5, pady=5)

        tk.Entry(connection\_frame, textvariable=self.port).grid(row=4, column=1, padx=5, pady=5)

        tk.Button(connection\_frame, text="Connect", command=self.connect\_db).grid(row=5, columnspan=2, pady=10)

        # Query section

        query\_frame = tk.Frame(self.root)

        query\_frame.pack(pady=10)

        tk.Label(query\_frame, text="Table Name:").grid(row=0, column=0, padx=5, pady=5)

        tk.Entry(query\_frame, textvariable=self.table\_name).grid(row=0, column=1, padx=5, pady=5)

        tk.Button(query\_frame, text="Load Data", command=self.load\_data).grid(row=1, columnspan=2, pady=10)

        self.data\_display = tk.Text(self.root, height=10, width=50)

        self.data\_display.pack(pady=10)

        # Insert section

        insert\_frame = tk.Frame(self.root)

        insert\_frame.pack(pady=10)

        self.column1 = tk.StringVar()

        self.column2 = tk.StringVar()

        tk.Label(insert\_frame, text="MSSV:").grid(row=0, column=0, padx=5, pady=5)

        tk.Entry(insert\_frame, textvariable=self.column1).grid(row=0, column=1, padx=5, pady=5)

        tk.Label(insert\_frame, text="Ho va ten:").grid(row=1, column=0, padx=5, pady=5)

        tk.Entry(insert\_frame, textvariable=self.column2).grid(row=1, column=1, padx=5, pady=5)

        tk.Button(insert\_frame, text="Insert Data", command=self.insert\_data).grid(row=2, columnspan=2, pady=10)

    def connect\_db(self):

        try:

            self.conn = psycopg2.connect(

                dbname=self.db\_name.get(),

                user=self.user.get(),

                password=self.password.get(),

                host=self.host.get(),

                port=self.port.get()

            )

            self.cur = self.conn.cursor()

            messagebox.showinfo("Success", "Connected to the database successfully!")

        except Exception as e:

            messagebox.showerror("Error", f"Error connecting to the database: {e}")

    def load\_data(self):

        try:

            query = sql.SQL("SELECT \* FROM {}").format(sql.Identifier(self.table\_name.get()))

            self.cur.execute(query)

            rows = self.cur.fetchall()

            self.data\_display.delete(1.0, tk.END)

            for row in rows:

                self.data\_display.insert(tk.END, f"{row}\n")

        except Exception as e:

            messagebox.showerror("Error", f"Error loading data: {e}")

    def insert\_data(self):

        try:

            insert\_query = sql.SQL("INSERT INTO {} (mssv, hoten) VALUES (%s, %s)").format(sql.Identifier(self.table\_name.get()))

            data\_to\_insert = (self.column1.get(), self.column2.get())

            self.cur.execute(insert\_query, data\_to\_insert)

            self.conn.commit()

            messagebox.showinfo("Success", "Data inserted successfully!")

        except Exception as e:

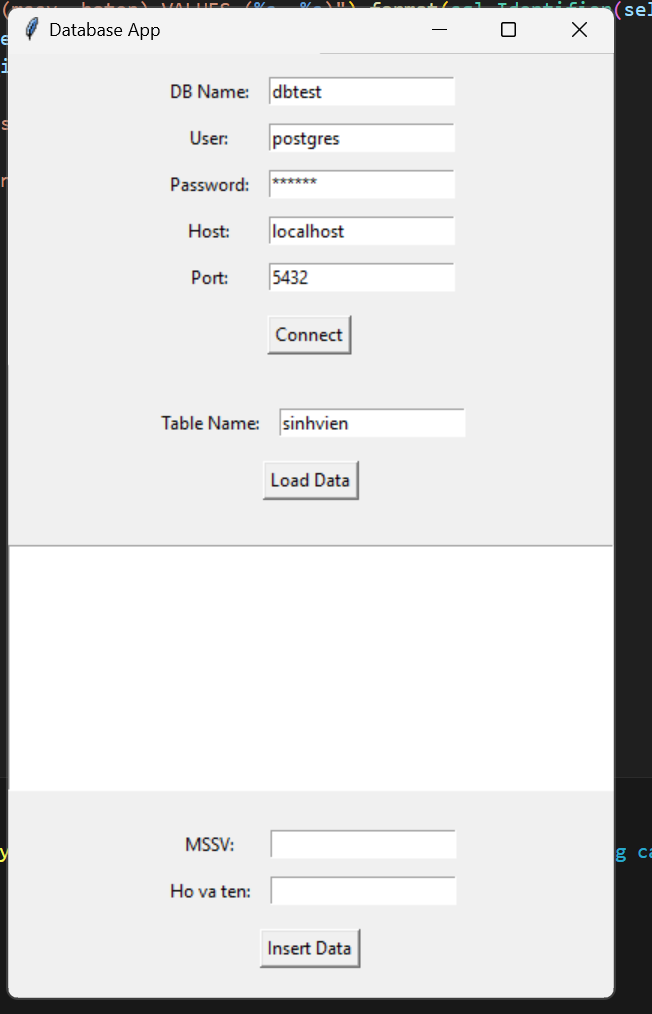
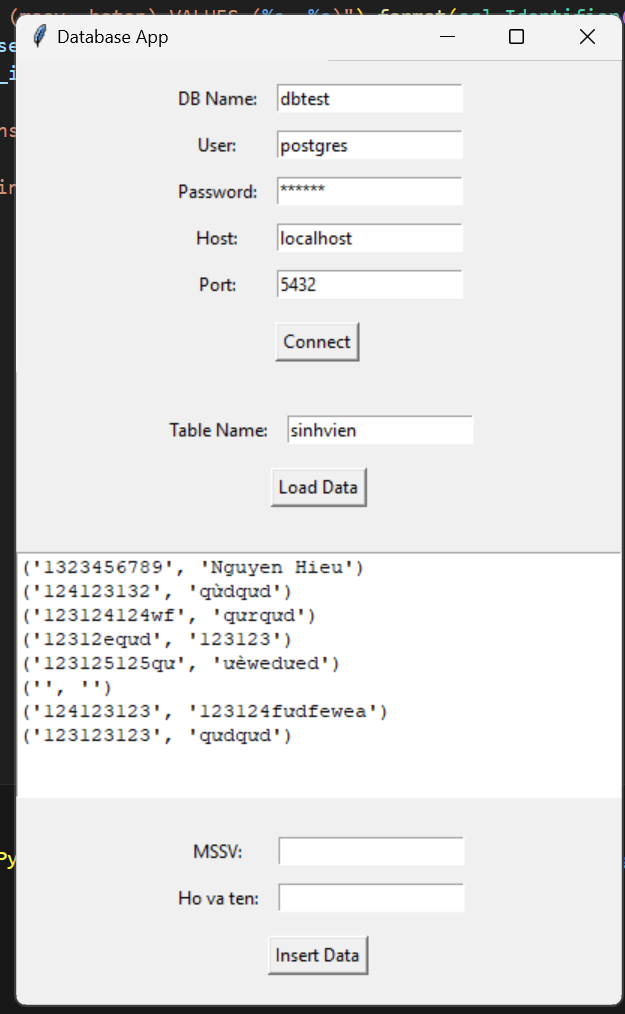
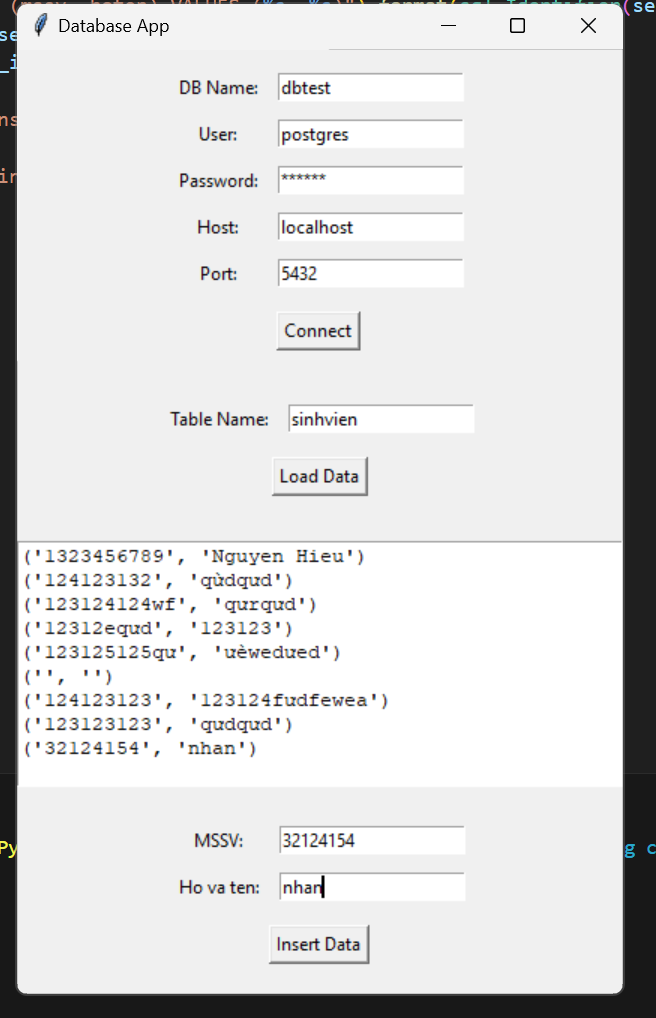
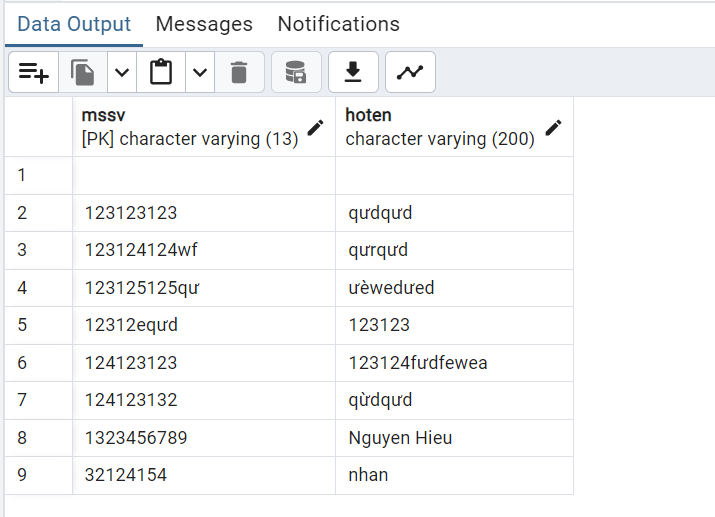
            messagebox.showerror("Error", f"Error inserting data: {e}")

if \_\_name\_\_ == "\_\_main\_\_":

    root = tk.Tk()

    app = DatabaseApp(root)

    root.mainloop()

Ảnh có chứa văn bản, ảnh chụp màn hình, Phông chữ, đa phương tiện

Mô tả được tạo tự động