**1.Design any creative application from the exercises that have been taught to you in this lab. Such as POS systems for any Pharmacy, or any grocery store, or BBQ restaurant, or Pizza Hut or any application which you like.**

# Source Code:

```
from tkinter import*
from tkinter import ttk
from tkinter import messagebox
import pypyodbc

root=Tk()
#variable
IDvar=StringVar()
Namevar=StringVar()
Phonevar=StringVar()
Addressvar=StringVar()
def display():
   conn = pypyodbc.connect(r'Driver={Microsoft Access Driver (*.mdb)};', DBQ='d:\std.mdb;')
   cursor = conn.cursor()
   cursor.execute("select * from student ORDER by ID ")
   rows = cursor.fetchall()
   if len(rows) != 0:
      for row in rows:
         stable.insert('', END, values=row)
      conn.commit()
   conn.close()


def add_std():
   conn = pypyodbc.connect(r'Driver={Microsoft Access Driver (*.mdb)};', DBQ='d:\std.mdb;')
   cur = conn.cursor()
   cur.execute( f"INSERT INTO student (ID,Name,Phone,Address)
values('{IDvar.get()}','{Namevar.get()}','{Phonevar.get()}','{Addressvar.get()}')")
   conn.commit()
   display()
   messagebox.showinfo("One record has been added")
   conn.close()
```

```
def del_std(self):
   conn = pypyodbc.connect(r'Driver={Microsoft Access Driver (*.mdb)};', DBQ='d:\std.mdb;')
   cur = conn.cursor()
   cur.execute(f"DELETE FROM student where ID='{self.IDvar.get()}'")
   conn.commit()
   self.display()
   messagebox.showinfo("hello", 'One record has been deleted')
   conn.close()


def upd_std(self):
   conn = pypyodbc.connect(r'Driver={Microsoft Access Driver (*.mdb)};', DBQ='d:\std.mdb;')
   cur = conn.cursor()
   cur.execute(f"UPDATE student set Address='{self.Addressvar.get()}' where
ID='{self.IDvar.get()}'")
   conn.commit()
   self.display()
   messagebox.showinfo("hello", 'One record has been Updated')
   conn.close()

t=Label(root,text="Student Management System",font=("times new
roman",40,"bold"),bg="gold",fg="red",bd=10)
t.pack(side=TOP,fill=X)
m=Frame(root,bd=4,bg='grey')
m.place(x=20,y=100,width=450,height=700)
l1=Label(m,text="std ID",font=("times new
roman",15,"bold"),bg="yellow",width=10).grid(row=0,column=0,padx=10,pady=10)
l2=Label(m,text="Std name",font=("times new
roman",15,"bold"),bg="yellow",width=10).grid(row=1,column=0,pady=10)
l3 = Label(m, text="Phone" ,font=("times new
roman",15,"bold"),bg="yellow",width=10).grid(row=2, column=0, pady=10)
l4 = Label(m, text="Address" ,font=("times new
roman",15,"bold"),bg="yellow",width=10).grid(row=3, column=0, pady=10)
l5 = Label(m, text="Program" ,font=("times new
roman",15,"bold"),bg="yellow",width=15).grid(row=4, column=0, pady=10)
```

```
l6 = Label(m, text="Comments" ,font=("times new
roman",15,"bold"),bg="yellow",width=15).grid(row=5, column=0, pady=10)
ID = Entry(m,textvariable=IDvar,width=20)
ID.grid(row=0, column=1, pady=15)
Name=Entry(m, textvariable=Namevar,width=20)
Name.grid(row=1,column=1,pady=15)
Phone=Entry(m, textvariable=Phonevar,width=20)
Phone.grid(row=2, column=1, pady=15)
Address = Entry(m, textvariable=Addressvar,width=20)
Address.grid(row=3, column=1, pady=15)
b1=Button(m,text="display",bd=8,font=("times new
roman",15,"bold"),bg="red",command=display,width=10).grid(row=7,column=0,padx=10,pad
y=20)
b2=Button(m, text="Insert",bd=8, font=("times new
roman",15,"bold"),bg="red",command=add_std,width=10).grid(row=7, column=1, pady=10)
b3=Button(m, text="Update",bd=8,font=("times new roman",15,"bold"),bg="red",
command=upd_std,width=10).grid(row=8, column=0, pady=10)
b4=Button(m, text="Delete",bd=8,font=("times new
roman",15,"bold"),bg="red",command=del_std, width=10).grid(row=8, column=1, pady=10)
program=ttk.Combobox(m)
program['values']=("CSIT","BESE","BEEE","BECE")
program.grid(row=4,column=1,padx=10,pady=20)
comm = Text(m, width=15,height=5)
comm.grid(row=5, column=1, padx=15,pady=20)
   # Another frame
m1=Frame(root, bd=4, bg='grey')
m1.place(x=450, y=100, width=850, height=700)
stable=ttk.Treeview(m1,height=700,columns=("ID","Name","Phone","Address"))
stable.pack()
display()

root.mainloop()
```