Jaypee University of Engineering and Technology

Advanced Programming Lab Record

Submitted By : Fanindra Saini
Enrollment No. : 211B116
Batch : B4
Submited To : Dr. Mahesh Kumar

Lab 9

#1. Write a python script to show a root graphical window

```
from tkinter import *
root=Tk()
root.mainloop()
```

#2. Write a python script to add hello world on the root window of GUI

```
from tkinter import *
root=Tk()
Label(root,text="Hello world").pack()
root.mainloop()
```

#4. Write a python script to add a button on the root window, name the button as GO

```
from tkinter import *
root=Tk()
Button(root,text="GO").pack()
root.mainloop()
```

#5. Write a python script to add event to the button added in previous problem and add string “Welcome....” to button event to the root window

```
from tkinter import *
root=Tk()
def event():
    Label(root,text="Welcome....").pack()
Button(root,text="GO",command=event).pack()
root.mainloop()
```

#6. Write a python script to add text box in GUI.

```
from tkinter import *
root=Tk()
Entry(root).pack()
root.mainloop()
```

#7. Write a python script to read First Name and Last Name using text boxes, Wish the user with the first name “ ….name…. Welcome to Python”

```
from tkinter import *
root=Tk()
first_name=Entry(root)
first_name.pack()
last_name=Entry(root)
last_name.pack()
def event():
    Label(root,text="Welcome...."+first_name.get()+" "+last_name.get()).pack()
Button(root,text="GO",command=event).pack()
root.mainloop()
```

#8. Write a python script to read two numbers and print their Sum/ Diff/ Multiplication/ Div/ Remainder on screen, using button for each operation.

```
from tkinter import *
root=Tk()
Label(root,text="Enter the First Number : ").pack()
num1=Entry(root)
num1.pack()
Label(root,text="Enter the Second Number : ").pack()
num2=Entry(root)
num2.pack()
```

```
####
def SUM():
    print(int(num1.get())+int(num2.get()))
def DIFF():
    print(int(num1.get())-int(num2.get()))
def MUL():
    print(int(num1.get())*int(num2.get()))
def DIV():
    print(int(num1.get())/int(num2.get()))
def REM():
    print(int(num1.get())%int(num2.get()))
####
Button(root,text="Sum",command=SUM).pack()
Button(root,text="Difference",command=DIFF).pack()
Button(root,text="Multiplication",command=MUL).pack()
Button(root,text="Division",command=DIV).pack()
Button(root,text="Remainder",command=REM).pack()
root.mainloop()
```

#9. Write a python script that creates a GUI with a single button. When the button is pressed it should create a second button. When that button is pressed, it should create a label that says, “Nice job!”. What happens if you press the buttons more than once?

```
from tkinter import *
root=Tk()
def event():
    Label(root,text="Nice job!").pack()
def new_button():
    Button(root,text="Press2",command=event).pack()
Button(root,text="Press1",command=new_button).pack()
root.mainloop()
```

#10. Write a python script to computer simple interest on the root window.

```
from tkinter import *
root=Tk()
Label(root,text="Enter the Principle Amount").pack()
principle=Entry(root)
principle.pack()
Label(root,text="Enter the Rate of Intrest").pack()
rate=Entry(root)
rate.pack()
Label(root,text="Enter the Time in Years").pack()
time=Entry(root)
time.pack()
def sim_int():
    si=int(principle.get())*int(rate.get())*int(time.get())/100
    Label(root,text="Simple Intrest = "+str(si)).pack()
Button(root,text="Calculate",command=sim_int).pack()
root.mainloop()
```

Lab10

#GUI1

```
from tkinter import *
class front:
    def __init__(self):
        root=Tk()
        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        root.geometry("%dx%d+0+0"%(w,h))
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        def home(e):
            root.destroy()
            from bbs_gui2 import home
            hm=home()
        root.bind("<Key>", home)
        top_frame=Frame(root)
        top_frame.grid(row=0,column=0,padx=w//3+125)
        dev_info=Frame(root)
        dev_info.grid(row=2,column=0,padx=w//3+125,pady=20)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light blue',fg='red').grid(pady=10)
        Label(dev_info,text="Name: Fanindra Saini",font="Ariel 12 bold ",fg='blue').grid(pady=40)
        Label(dev_info,text="Er: 211B116",font="Ariel 12 bold ",fg='blue').grid()
        Label(dev_info,text="Mobile: XXXXXXXXXX",font="Ariel 12 bold ",fg='blue').grid(pady=40)
        Label(dev_info,text="Submitted to: Dr. Mahesh Kumar",font="Ariel 16 bold ",bg='powder blue',fg='red').grid()
        Label(dev_info,text="Project Based Learning",font="Ariel 12 bold ",fg='red').grid()
        root.mainloop()
fr=front()
```

#GUI2 home

```
from tkinter import *
class home:
    def __init__(self):
        root=Tk()
        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        root.geometry("%dx%d+0+0"%(w,h))
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        def seat_booking():
            root.destroy()
            from bbs_gui3 import journey
            jr=journey()
        def check_booking_status():
            root.destroy()
            from bbs_gui5 import cyb
            cy=cyb()
        def add_bus_details():
            root.destroy()
            from bbs_gui6 import details
            dt=details()
        top_frame=Frame(root)
        top_frame.grid(row=0,column=2,padx=w//3-40)
        mid_frame=Frame(root)
        mid_frame.grid(row=2,column=2,padx=w//3-40,pady=20)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light
blue',fg='red',relief="groove",bd=2).grid(pady=20)
```

```
        Button(mid_frame,text="Seat Booking",command=seat_booking,font="Ariel 12 bold ", bg= "#91e288 ",
activebackground="#91e288") .grid(row=2,column=1,padx=30)
        Button(mid_frame,text="Check Booked Seats",command=check_booking_status,font="Ariel 12 bold
",bg='green3',activebackground="green3").grid(row=2,column=2,padx=30)
        Button(mid_frame,text="Add Bus Details",command=add_bus_details,font="Ariel 12 bold
",bg='green4',activebackground="green4").grid(row=2,column=3,padx=30)
        Label(mid_frame,text="For Admins Only",font="Ariel 10 bold ",fg='red').grid(row=4,column=3,padx=30,pady=10)
        root.mainloop()
```

#GUI 3 book

```
from tkinter import *
from tkinter import messagebox
import random
import sqlite3
class journey:
    def __init__(self) :

        self.con=sqlite3.connect("bbsdb.db")
        self.cur=self.con.cursor()
        self.root=Tk()
        w,h=self.root.winfo_screenwidth(),self.root.winfo_screenheight()
        self.root.geometry("%dx%d+0+0"%(w,h))
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        img2=PhotoImage(file="project_resources/home.png")
        top_frame=Frame(self.root)
        top_frame.grid(row=0,column=2,padx=w//5)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light
blue',fg='red',relief="groove",bd=2).grid(pady=10)
        w,h=self.root.winfo_screenwidth(),self.root.winfo_screenheight()
        self.img2=PhotoImage(file="project_resources/home.png")
        mid_frame=Frame(self.root)
        mid_frame.grid(row=2,column=2,padx=w//5,pady=20)
        Label(mid_frame,text="Enter Journey Details",font="Ariel 14 bold ",bg='light
green',fg='green',relief="groove",bd=2).grid(row=2,column=0,columnspan=15,pady=10)
        Label(mid_frame,text="To",font="Ariel 12 bold ").grid(row=3,column=4)
        self.to=Entry(mid_frame,font="Ariel 12 bold ")
        self.to.grid(row=3,column=5)
        Label(mid_frame,text="From",font="Ariel 12 bold ").grid(row=3,column=6)
        self.fro=Entry(mid_frame,font="Ariel 12 bold ")
        self.fro.grid(row=3,column=7)
        Label(mid_frame,text="Journey Date",font="Ariel 12 bold ").grid(row=3,column=8)
        self.jdate=Entry(mid_frame,font="Ariel 12 bold ")
        self.jdate.grid(row=3,column=9)
        def home():
            self.cur.close()
            self.con.close()
            self.root.destroy()
            from bbs_gui2 import home
            hm=home()
        Button(mid_frame,text="Show Bus",command=self.sel_bus,font="Ariel 12 bold
",bg='SpringGreen3',activebackground="SpringGreen3",bd=5).grid(row=3,column=10,padx=10)
        Button(mid_frame,image=self.img2,bd=3,command=home).grid(row=3,column=11,padx=10)
        self.root.mainloop()
    def sel_bus(self):
        select_bus=Frame(self.root)
        select_bus.grid(row=5,column=2,pady=20)
```

```
        self.to_st=self.to.get()
        self.source=self.fro.get()
        self.tr_on=self.jdate.get()
        #cur.execute('select DISTINCT b.bid,oname,b.bus_type,seat_available,b.fare from operator,buses as b,route as r1,route as r2,run where (r1.sta_name="{0}" and r2.sta_name="{1}") and r1.staid>r2.staid and run_date="{2}" and b.rid=r2.rid; '.format(t,f,j))
        #cur.execute('select DISTINCT b.bid,oname, b.bus_type,seat_available,b.fare from operator, buses as b,route as r1,route as r2,run where (r1.staid>r2.staid) and (r1.sta_name="{0}" and r2.sta_name="{1}") and (run.run_date="{2}") and (b.rid=r1.rid and run.bid=b.bid and b.oid=operator.oid); '.format(self.to_st,self.source,self.tr_on))
        #select DISTINCT b.bid,o.oname,b.bus_type,b.capacity,b.fare, r1.staid,r1.sta_name,r2.staid,r2.sta_name from route as r1,route as r2,run as rn,buses as b,operator as o where r1.sta_name="Bhopal" and r2.sta_name="Guna" and run_date="30/11/2022" and r1.staid>r2.staid and b.rid=r1.rid and b.bid=rn.bid and b.oid=o.oid;
        self.cur.execute('select DISTINCT b.bid,o.oname,b.bus_type,b.capacity,b.fare, r1.staid,r1.sta_name,r2.staid,r2.sta_name from route as r1,route as r2,run as rn,buses as b,operator as o where r1.sta_name="{0}" and r2.sta_name="{1}" and run_date="{2}" and r1.staid>r2.staid and b.rid=r1.rid and b.bid=rn.bid and b.oid=o.oid;'.format(self.to_st,self.source,self.tr_on))
        self.res=self.cur.fetchall()
        Label(select_bus,text="Select Bus",font="Ariel 12 bold ",fg='green').grid(row=5,column=2,padx=60)
        Label(select_bus,text="Opertor",font="Ariel 12 bold ",fg='green').grid(row=5,column=3,padx=60)
        Label(select_bus,text="Bus Type",font="Ariel 12 bold ",fg='green').grid(row=5,column=4,padx=60)
        Label(select_bus,text="Available/Capacity",font="Ariel 12 bold ",fg='green').grid(row=5,column=5,padx=60)
        Label(select_bus,text="Fare",font="Ariel 12 bold ",fg='green').grid(row=5,column=6,padx=60)
        Button(select_bus,text="Proceed to Book",command=self.book,font="Ariel 12 bold ",bg='lime green',activebackground="lime green",bd=3).grid(row=6,column=10,padx=60)
        j=0
        self.bus_select=StringVar()
        for i in self.res:
            print(i[0],i[1],i[2],i[3],i[4])
            j+=1
            Radiobutton(select_bus,text="Bus"+str(j),variable=self.bus_select,value=i[0],indicator=0,font="Ariel 12 bold ",bg='light blue',activebackground="lime green").grid(row=6+j,column=2,padx=60)
            Label(select_bus,text=i[1],font="Ariel 12 bold ",fg='green').grid(row=6+j,column=3,padx=60)
            Label(select_bus,text=i[2],font="Ariel 12 bold ",fg='green').grid(row=6+j,column=4,padx=60)
            Label(select_bus,text=i[3],font="Ariel 12 bold ",fg='green').grid(row=6+j,column=5,padx=60)
            Label(select_bus,text=i[4],font="Ariel 12 bold ",fg='green').grid(row=6+j,column=6,padx=60)
    def book(self):
        booking=Frame(self.root)
        booking.grid(row=10,column=2,pady=20)
        Label(booking,text="Fill Pasenger Details to book the bus ticket",font="Ariel 16 bold ",bg='light blue',fg='red',relief="groove",bd=2).grid(row=0,column=0,columnspan=15,pady=30)
        Label(booking,text="Name",font="Ariel 12 bold ").grid(row=2,padx=10, column=4)
        self.name=Entry(booking,font="Ariel 12 bold ")
        self.name.grid(row=2,padx=10, column=5)
        Label(booking,text="Gender",font="Ariel 12 bold ").grid(row=2,padx=10, column=6)
        self.gen=StringVar()
        opt=["Male","Female"]
        self.gen.set(opt[0])
        gen_menu=OptionMenu(booking,self.gen,*opt)
        gen_menu.config(font="Ariel 10 italic")
        gen_menu.grid(row=2,padx=10, column=7)
        Label(booking,text="No of Seats",font="Ariel 12 bold ").grid(row=2,padx=10, column=8)
        self.seats=Entry(booking,font="Ariel 12 bold ")
        self.seats.grid(row=2,padx=10, column=9)
        Label(booking,text="Mobile No ",font="Ariel 12 bold ").grid(row=2,padx=10, column=10)
        self.mob=Entry(booking,font="Ariel 12 bold ")
        self.mob.grid(row=2,padx=10, column=11)
        Label(booking,text="Age",font="Ariel 12 bold ").grid(row=2,padx=10, column=12)
```

```
        self.age=Entry(booking,font="Ariel 12 bold ")
        self.age.grid(row=2,padx=10, column=13)
        Button(booking,text="Book Seat",font="Ariel 12 bold ",bg='light green',activebackground="light
green",command=self.rec,bd=3).grid(row=2,column=14,padx=10)
    def rec(self):
        n=self.name.get()
        g=self.gen.get()
        s=self.seats.get()
        m=self.mob.get()
        a=self.age.get()
        self.bno=self.bus_select.get()
        print(self.bno)
        for i in self.res:
            if(i[0]==self.bno):
                op=i[1]
                fr=i[4]
        bref=random.randint(1000000,9999999)
        print(bref)
        query='insert into
pass_booking(book_ref,pname,gender,age,phone,seats,travel_on,booked_on,boarding_point,bus_operator,fare,destination_poin
t,bid) values({0},"{1}","{2}",{3},"{4}",{5},"{6}",DATE(),"{7}","{8}",
{9},"{10}","{11}")'.format(bref,n,g,a,m,s,self.tr_on,self.source,op,fr,self.to_st,self.bno)
        print(query)
        fare_conf=messagebox.askyesno("Fare Confirmation","Confirm Payment")
        if(fare_conf==True):
            o=self.qx(query)
            if o==True:
                query='update run set seat_available=seat_available-{0} where bid="{1}" and
run_date="{2}"'.format(s,self.bno,self.tr_on)
                self.qx(query)
                self.con.commit()
                self.cur.close()
                self.con.close()
                self.root.destroy()
                from bbs_gui4 import tic
                tk=tic(bref)
            else:
                raise Exception("Something went wrong.")
    def qx(self,query):
        self.cur.execute(query)
        self.con.commit()
        return True
```

#GUI 4

```
#!/usr/bin/env python3
from tkinter import *
from tkinter import messagebox
import sqlite3
class tic:
    def __init__(self,brf):
        con=sqlite3.Connection('bbsdb.db')
        cur=con.cursor()
        cur.execute('select * from pass_booking where book_ref={0}'.format(brf))
        res=cur.fetchall()
        root=Tk()
        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        root.geometry("%dx%d+0+0"%(w,h))
```

```
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        messagebox.showinfo("Success","Seat Booked.....")
        top_frame=Frame(root)
        top_frame.grid(row=0,column=0,padx=w//3+125)
        ticket=Frame(root,relief="groove",borderwidth=5)
        ticket.grid(row=2,column=0,padx=w//3+125,pady=20)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light
blue',fg='red',relief="groove",bd=2).grid(pady=10)
        total=res[0][5]*res[0][10]
        Label(top_frame,text="Bus Ticket",font="Ariel 10 bold").grid()
        Label(ticket,text="Passengers: "+res[0][1],font="Ariel 10 bold").grid(row=0,column=0)
        Label(ticket,text="No of Seats: "+str(res[0][5]),font="Ariel 10 bold").grid(row=1,column=0)
        Label(ticket,text="Age:"+str(res[0][3]),font="Ariel 10 bold").grid(row=2,column=0)
        Label(ticket,text="Booking Ref.:"+str(res[0][0]),font="Ariel 10 bold").grid(row=3,column=0)
        Label(ticket,text="Travel On: "+res[0][6],font="Ariel 10 bold").grid(row=4,column=0)
        Label(ticket,text="Fare per Person: ₹"+str(res[0][10]),font="Ariel 10 bold").grid(row=5,column=0)
        Label(ticket,text="Bus ID: "+res[0][12],font="Ariel 10 bold").grid(row=6,column=0)
        Label(ticket,text="Gender: "+res[0][2],font="Ariel 10 bold").grid(row=0,column=2)
        Label(ticket,text="Phone: "+res[0][4],font="Ariel 10 bold").grid(row=1,column=2)
        Label(ticket,text="Total Fare: ₹"+str(total),font="Ariel 10 bold").grid(row=2,column=2)
        Label(ticket,text="Bus Detail: "+str(res[0][9]),font="Ariel 10 bold").grid(row=3,column=2)
        Label(ticket,text="Booked On: "+res[0][7],font="Ariel 10 bold").grid(row=4,column=2)
        Label(ticket,text="Boarding Point: "+res[0][8],font="Ariel 10 bold").grid(row=5,column=2)
        Label(ticket,text="Destination Point: "+res[0][11],font="Ariel 10 bold").grid(row=6,column=2)
        Label(ticket,text="*Total amount ₹"+str(total)+"/- is  to be paid at the time of boarding bus",font="Ariel
8").grid(column=0,columnspan=2)
        def on_closing():
            mess=messagebox.askyesnocancel("quit","do you want to quit")
            if mess:
                print(mess)
                root.destroy()
            elif mess=="None":
                print(mess)
            else:
                root.destroy()
                from bbs_gui2 import home
                hm=home()
        root.protocol("WM_DELETE_WINDOW", on_closing)
        root.mainloop()
```

#GUI 5

```
from tkinter import *
from tkinter import messagebox
import sqlite3
class cyb:
    def __init__(self):
        root=Tk()
        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        root.geometry("%dx%d+0+0"%(w,h))
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        img2=PhotoImage(file="project_resources/home.png")
        top_frame=Frame(root)
        top_frame.grid(row=0,column=0,padx=w//3)
        booking=Frame(root)
        booking.grid(row=2,column=0,padx=w//3,pady=20)
        Label(top_frame,image=img).grid(pady=10)
```

```
    Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light
blue',fg='red',relief="raised").grid(pady=10)
    Label(booking,text="Check Your Booking",font="Ariel 14 bold ",bg='light
green',fg='green',relief="raised").grid(column=1, pady=10)
    Label(booking,text="Enter Your Mobile No:",font="Ariel 12 bold ").grid(row=3,column=0)
    mn=Entry(booking,font="Ariel 12 bold ")
    mn.grid(row=3,column=1)
    def check_tic():
      pho=mn.get()
      con=sqlite3.connect('bbsdb.db')
      cur=con.cursor()
      cur.execute('select * from pass_booking where phone="{0}"'.format(pho))
      res=cur.fetchall()
      if res==[]:
        messagebox.showinfo("Check Bookings","No bookings Found")
      else:
        ticket=Frame(root,relief="groove",borderwidth=5)
        ticket.grid(row=5,column=0,padx=w//3+125,pady=20)
        total=res[0][5]*res[0][10]
        Label(ticket,text="Passengers: "+res[0][1],font="Ariel 10 bold").grid(row=0,column=0)
        Label(ticket,text="No of Seats: "+str(res[0][5]),font="Ariel 10 bold").grid(row=1,column=0)
        Label(ticket,text="Age:"+str(res[0][3]),font="Ariel 10 bold").grid(row=2,column=0)
        Label(ticket,text="Booking Ref.:"+str(res[0][0]),font="Ariel 10 bold").grid(row=3,column=0)
        Label(ticket,text="Travel On: "+res[0][6],font="Ariel 10 bold").grid(row=4,column=0)
        Label(ticket,text="Fare per Person: ₹"+str(res[0][10]),font="Ariel 10 bold").grid(row=5,column=0)
        Label(ticket,text="Bus ID: "+res[0][12],font="Ariel 10 bold").grid(row=6,column=0)
        Label(ticket,text="Gender: "+res[0][2],font="Ariel 10 bold").grid(row=0,column=2)
        Label(ticket,text="Phone: "+res[0][4],font="Ariel 10 bold").grid(row=1,column=2)
        Label(ticket,text="Total Fare: ₹"+str(total),font="Ariel 10 bold").grid(row=2,column=2)
        Label(ticket,text="Bus Detail: "+str(res[0][9]),font="Ariel 10 bold").grid(row=3,column=2)
        Label(ticket,text="Booked On: "+res[0][7],font="Ariel 10 bold").grid(row=4,column=2)
        Label(ticket,text="Boarding Point: "+res[0][8],font="Ariel 10 bold").grid(row=5,column=2)
        Label(ticket,text="Destination Point: "+res[0][11],font="Ariel 10 bold").grid(row=6,column=2)
        Label(ticket,text="*Total amount ₹"+str(total)+"/- is  to be paid at the time of boarding bus",font="Ariel
8").grid(column=0,columnspan=2)
    def home():
      root.destroy()
      from bbs_gui2 import home
      hm=home()
    Button(booking,image=img2,bd=3,command=home).grid(row=3,column=4,padx=10)
    Button(booking,text="Check Booking",command=check_tic,font="Ariel 12 bold ").grid(row=3,column=2,padx=10)
    root.mainloop()
```

#GUI 6

```
from tkinter import *
class details:
  def __init__(self):
    root=Tk()
    w,h=root.winfo_screenwidth(),root.winfo_screenheight()
    root.geometry("%dx%d+0+0"%(w,h))
    img=PhotoImage(file="project_resources/Bus_for_project.png")
    top_frame=Frame(root)
    top_frame.grid(row=0,column=0,columnspan=20,padx=w//3)
    mid_frame=Frame(root)
    mid_frame.grid(row=2,column=0,columnspan=20,padx=w//3,pady=20)
    Label(top_frame,image=img).grid(pady=10)
    Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ", fg='red').grid(pady=20)
```

```
        def new_operator():
            root.destroy()
            from bbs_gui7 import operator
            op=operator()
        def new_bus():
            root.destroy()
            from bbs_gui8 import bus
            ab=bus()
        def new_route():
            root.destroy()
            from bbs_gui9 import route
            rt=route()
        def new_run():
            root.destroy()
            from bbs_gui10 import run
            rn=run()
        Label(mid_frame,text="Add New Details to Database",font="Ariel 14 bold
",fg='green',relief="solid").grid(columnspan=20,pady=20)
        Button(mid_frame,text="New Operator",command=new_operator, font="Ariel 12 bold ",bg='lime
green',activebackground="lime green").grid(row=2,column=1,padx=30)
        Button(mid_frame,text="New Bus",command=new_bus,font="Ariel 12 bold
",bg='tomato',activebackground="tomato").grid(row=2,column=2,padx=30)
        Button(mid_frame,text="New Route",command=new_route,font="Ariel 12 bold
",bg='RoyalBlue1',activebackground="RoyalBlue1").grid(row=2,column=3,padx=30)
        Button(mid_frame,text="New Run",command=new_run,font="Ariel 12 bold
",bg='LightPink3',activebackground="LightPink3").grid(row=2,column=4,padx=30)
        root.mainloop()
```

#GUI 7

```
from tkinter import *
from tkinter.messagebox import showinfo
import sqlite3
class operator:
    def __init__(self) :
        root=Tk()
        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        root.geometry("%dx%d+0+0"%(w,h))

        #img=PhotoImage(file="C:\\Users\\211B116\\Desktop\\fansan\\AP\\Lab10\\Project\\Bus_for_project.png")
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        #img=PhotoImage(file="C:\\Users\\211B116\\Desktop\\fansan\\AP\\Lab10\\Project\\home.png")
        img2=PhotoImage(file="project_resources/home.png")

        top_frame=Frame(root)
        top_frame.grid(row=0,column=0,padx=w//5-225)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light blue',fg='red').grid(pady=10)

        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        mid_frame=Frame(root)
        mid_frame.grid(row=2,column=0,padx=w//5-225,pady=20)
        Label(mid_frame,text="Add Bus Operator Details",font="Ariel 16 bold
",fg='red',relief="raised").grid(columnspan=20,pady=30)

        Label(mid_frame,text="Operator id",font="Ariel 12 bold ").grid(row=2, column=0)
        self.oid=Entry(mid_frame,font="Ariel 12 bold ")
        self.oid.grid(row=2, column=1)
```

```
        Label(mid_frame,text="Name",font="Ariel 12 bold ").grid(row=2, column=2)
        self.name=Entry(mid_frame,font="Ariel 12 bold ")
        self.name.grid(row=2, column=3)

        Label(mid_frame,text="Address",font="Ariel 12 bold ").grid(row=2, column=4)
        self.address=Entry(mid_frame,font="Ariel 12 bold ")
        self.address.grid(row=2, column=5)

        Label(mid_frame,text="Phone ",font="Ariel 12 bold ").grid(row=2, column=6)
        self.phone=Entry(mid_frame,font="Ariel 12 bold ")
        self.phone.grid(row=2, column=7)

        Label(mid_frame,text="Email",font="Ariel 12 bold ").grid(row=2, column=8)
        self.email=Entry(mid_frame,font="Ariel 12 bold ")
        self.email.grid(row=2, column=9)
        Button(mid_frame,text="Add",font="Ariel 12 bold ",bg='light green',activebackground="light
green",command=lambda:self.rec(1)).grid(row=2,column=14)
        Button(mid_frame,text="Edit",font="Ariel 12 bold ",bg='light green',activebackground="light
green",command=lambda:self.rec(2)).grid(row=2,column=15)
        def home():
            root.destroy()
            from bbs_gui2 import home
            hm=home()
        Button(mid_frame,image=img2,bd=3,command=home).grid(row=3,column=14,padx=10)
        root.mainloop()
    def rec(self,x):
        o=self.oid.get()
        n=self.name.get()
        a=self.address.get()
        p=self.phone.get()
        e=self.email.get()
      try:
         if x==1:
            query='insert into operator(oid,oname,phone,email,address) values({0},"{1}","{2}","{3}","{4}")'.format(o,n,p,e,a)
         elif x==2:
            query='update operator set oid={0},oname="{1}",phone="{2}",email="{3}",address="{4}"'.format(o,n,p,e,a)
         print(query)
         o=self.qx(query)
         print(query)
         if o==True and x==1:
            a=showinfo("Operator Details","Operator record added Succesfully.")
         elif o==True and x==2:
            a=showinfo("Operators Details","Operator Record Updated Succesfully.")
         else:
            raise Exception("Something went wrong.")
      except:
          a=showinfo("Failure","    Operation Unsuccesful.\nMaybe Record already Exist or you have Entered Wrong Values.\n
Please try Again")
    def qx(self,query):
        con=sqlite3.Connection('bbsdb.db')
        cur=con.cursor()
        cur.execute(query)
        con.commit()
        cur.close()
        con.close()
        return True
```

#GUI 8

```
from tkinter import *
from tkinter.messagebox import showinfo
import sqlite3
class bus:
    def __init__(self):
        root=Tk()
        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        root.geometry("%dx%d+0+0"%(w,h))
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        img2=PhotoImage(file="project_resources/home.png")
        top_frame=Frame(root)
        top_frame.grid(row=0,column=0,padx=w//5-100)
        mid_frame=Frame(root)
        mid_frame.grid(row=2,column=0,padx=100, pady=20)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light blue',fg='red').grid(pady=10)
        Label(mid_frame,text="Add Bus Details",font="Ariel 16 bold
",fg='red',relief="raised").grid(row=0,column=0,columnspan=20,padx=200,pady=30)
        Label(mid_frame,text="Bus id",font="Ariel 12 bold ").grid(row=2, column=4)
        self.bid=Entry(mid_frame,font="Ariel 12 bold ")
        self.bid.grid(row=2, column=5)
        Label(mid_frame,text="Bus Type",font="Ariel 12 bold ").grid(row=2,padx=10, column=6)
        self.bus_type=StringVar()
        opt=["AC 2X2","AC 3X2","Non AC 2X2","Non AC 3X2","AC-Sleeper 2x1","Non-AC Sleeper 2x1"]
        self.bus_type.set(opt[0])
        bus_type_menu=OptionMenu(mid_frame,self.bus_type,*opt)
        bus_type_menu.grid(row=2,padx=10, column=7)
        Label(mid_frame,text="Capacity",font="Ariel 12 bold ").grid(row=2, column=8)
        self.capacity=Entry(mid_frame,font="Ariel 12 bold ")
        self.capacity.grid(row=2, column=9)
        Label(mid_frame,text="Fare Rs",font="Ariel 12 bold ").grid(row=2, column=10)
        self.fare=Entry(mid_frame,font="Ariel 12 bold ")
        self.fare.grid(row=2, column=11)
        Label(mid_frame,text="Operator ID",font="Ariel 12 bold ").grid(row=2, column=12)
        self.oid=Entry(mid_frame,font="Ariel 12 bold ")
        self.oid.grid(row=2, column=13)
        Label(mid_frame,text="Route id",font="Ariel 12 bold ").grid(row=2, column=14)
        self.rid=Entry(mid_frame,font="Ariel 12 bold ")
        self.rid.grid(row=2, column=15)
        Button(mid_frame,text="Add Bus",font="Ariel 12 bold ",bg='light green',activebackground="light
green",command=lambda:self.rec(1)).grid(row=3,column=9,pady=30)
        Button(mid_frame,text="Edit Bus",font="Ariel 12 bold ",bg='light green',activebackground="light
green",command=lambda:self.rec(2)).grid(row=3,column=10,pady=30)
        def home():
            root.destroy()
            from bbs_gui2 import home
            hm=home()
        Button(mid_frame,image=img2,command=home).grid(row=3,column=11,pady=30)
        root.mainloop()
    def rec(self,x):
        n=self.bid.get()
        o=self.oid.get()
        r=self.rid.get()
        bt=self.bus_type.get()
        c=self.capacity.get()
```

```
        f=self.fare.get()
        try:
            if x==1:
                query='insert into buses(bid,oid,rid,bus_type,capacity,fare) values("{0}",{1},{2},"{3}",{4},{5})'.format(n,o,r,bt,c,f)
            elif x==2:
                query='update buses set bid="{0}",oid={1},rid={2},bus_type="{3}",capacity={4},fare={5} where
bid="{0}"'.format(n,o,r,bt,c,f)
            print(query)
            o=self.qx(query)
            if o==True and x==1:
                a=showinfo("Bus Details","Bus record added Succesfully.")
            elif o==True and x==2:
                a=showinfo("Bus Details"," Bus Record Updated Succesfully.")
            else:
                raise Exception("Something went wrong.")
        except:
            a=showinfo("Failure","    Operation Unsuccesful.\nMaybe Record already Exist or you have Entered Wrong Values.\n
Please try Again")
    def qx(self,query):
        con=sqlite3.Connection("bbsdb.db")
        cur=con.cursor()
        cur.execute(query)
        con.commit()
        cur.close()
        con.close()
        return True
```

#GUI 9

```
from tkinter import *
from tkinter.messagebox import showinfo
import sqlite3
class route:
    def __init__(self):
        root=Tk()
        w,h=root.winfo_screenwidth(),root.winfo_screenheight()
        root.geometry("%dx%d+0+0"%(w,h))
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        img2=PhotoImage(file="project_resources/home.png")
        top_frame=Frame(root)
        top_frame.grid(row=0,column=0,padx=w//5-150)
        mid_frame=Frame(root)
        mid_frame.grid(row=2,column=0,padx=w//5-150, pady=20)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light blue',fg='red').grid(pady=10)
        Label(mid_frame,text="Add Bus Route Details",font="Ariel 16 bold
",fg='red',relief="raised").grid(columnspan=20,padx=200,pady=30)
        Label(mid_frame,text="Route id",font="Ariel 12 bold ").grid(row=2, column=2,padx=10)
        self.rid=Entry(mid_frame,font="Ariel 12 bold ")
        self.rid.grid(row=2, column=3)
        Label(mid_frame,text="Station Name",font="Ariel 12 bold ").grid(row=2, column=4,padx=10)
        self.st_name=Entry(mid_frame,font="Ariel 12 bold ")
        self.st_name.grid(row=2, column=5)
        Label(mid_frame,text="Station ID",font="Ariel 12 bold ").grid(row=2, column=6,padx=10)
        self.st_id=Entry(mid_frame,font="Ariel 12 bold ")
        self.st_id.grid(row=2, column=7)
        Button(mid_frame,text="Add Route",font="Ariel 12 bold ",bg='light green',activebackground="light
green",command=lambda:self.rec(1)).grid(row=2,column=9,padx=20)
```

```
        Button(mid_frame,text="Delete Route",font="Ariel 12 bold ",bg='light green',fg="red",activebackground="light
green",command=lambda:self.rec(3)).grid(row=2,column=10,padx=20)
        def home():
            root.destroy()
            from bbs_gui2 import home
            hm=home()
        Button(mid_frame,image=img2,command=home).grid(row=3,column=8,pady=30)
        root.mainloop()
    def rec(self,x):
        r=self.rid.get()
        stid=self.st_id.get()
        stn=self.st_name.get()
        if x==1:
            query='insert into route(rid,staid,sta_name) values({0},{1},"{2}") '.format(r,stid,stn)
        elif x==3:
            query=' delete from route where rid={0} and staid={1} and sta_name="{2}" '.format(r,stid,stn)
        print(query)
        o=self.qx(query)
        if o==True and x==1:
            a=showinfo("Route","record added Succesfully.")
        elif o==True and x==3:
            a=showinfo("Route"," Record deleated Succesfully.")
        else:
            print("Something Went Wrong")
    def qx(self,query):
        con=sqlite3.connect("bbsdb.db")
        cur=con.cursor()
        cur.execute(query)
        con.commit()
        cur.close()
        con.close()
        return True
```

#GUI 10

```
from tkinter import *
from tkinter.messagebox import showinfo
import sqlite3
root=Tk()
w,h=root.winfo_screenwidth(),root.winfo_screenheight()
root.geometry("%dx%d+0+0"%(w,h))
class run:
    def __init__(self):
        img=PhotoImage(file="project_resources/Bus_for_project.png")
        img2=PhotoImage(file="project_resources/home.png")
        top_frame=Frame(root)
        top_frame.grid(row=0,column=0,padx=w//5-150)
        mid_frame=Frame(root)
        mid_frame.grid(row=2,column=0,padx=w//5-150, pady=20)
        Label(top_frame,image=img).grid(pady=10)
        Label(top_frame,text="Online Bus Booking System",font="Ariel 18 bold ",bg='light blue',fg='red').grid(pady=10)
        Label(mid_frame,text="Add Bus Running Details",font="Ariel 16 bold
",fg='red',relief="raised").grid(columnspan=20,padx=200,pady=30)
        Label(mid_frame,text="Bus id",font="Ariel 12 bold ").grid(row=2, column=2,padx=10)
        self.bid=Entry(mid_frame,font="Ariel 12 bold ")
        self.bid.grid(row=2, column=3)
        Label(mid_frame,text="Running Date",font="Ariel 12 bold ").grid(row=2, column=4,padx=10)
        self.rdate=Entry(mid_frame,font="Ariel 12 bold ")
```

```
        self.rdate.grid(row=2, column=5)
        Label(mid_frame,text="Seat Available",font="Ariel 12 bold ").grid(row=2, column=6,padx=10)
        self.savail=Entry(mid_frame,font="Ariel 12 bold ")
        self.savail.grid(row=2, column=7)
        Button(mid_frame,text="Add Run",font="Ariel 12 bold ",bg='light green',activebackground="light
green",command=lambda:self.rec(1)).grid(row=2,column=9,padx=20)
        Button(mid_frame,text="Delete Run",font="Ariel 12 bold ",bg='light green',fg="red",activebackground="light
green",command=lambda:self.rec(3)).grid(row=2,column=10,padx=20)
        def home():
            root.destroy()
            from bbs_gui2 import home
            hm=home()
        Button(mid_frame,image=img2,command=home).grid(row=3,column=8,pady=30)
        root.mainloop()
    def rec(self,x):
        id=self.bid.get()
        seat_avail=self.savail.get()
        rdt=self.rdate.get()
        if x==1:
            query='insert into run(bid,seat_available,run_date) values("{0}",{1},"{2}") '.format(id,seat_avail,rdt)
        elif x==3:
            query=' delete from run where bid="{0}" and run_date="{1}"'.format(id,rdt)
        print(query)
        o=self.qx(query)
        if o==True and x==1:
            a=showinfo("Run","record added Succesfully.")
        elif o==True and x==3:
            a=showinfo("Run"," Record deleated Succesfully.")
        else:
            print("Something Went Wrong")
    def qx(self,query):
        con=sqlite3.connect("bbsdb.db")
        cur=con.cursor()
        cur.execute(query)
        con.commit()
        cur.close()
        con.close()
        return True
```