# ADVANCED PROGRAMMING LAB-1

## LAB RECORD

***Submitted by***

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2022-2023

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# Lab Exercise 9: Lab GUI

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(frame, 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 fun():
Label(root,text='welcome').pack()
Button(frame, text='GO',command=fun).pack()
root.mainloop()
```

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

```
from tkinter import *
root = Tk()
my_text= Text (root, width=60, height=20)
my_text.pack(pady=20)
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()
def fun():
Label(root,text='welcome'+a.get()).pack()
a=Entry(root)
a.pack()
Button(root,text='ok',command=fun).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()
A=Label(root,text='Enter Value of A:-')
A.pack()
a=Entry(root)
a.pack()
B=Label(root,text='Enter Value of B:-')
B.pack()
b=Entry(root)
b.pack()

def plus():
    n1=float(a.get())
    n2=float(b.get())
    s=n1+n2
    Label(root,text='{} + {} = {}'.format(n1,n2,s)).pack()

def minus():
    n1=float(a.get())
    n2=float(b.get())
    s=n1-n2
    Label(root,text='{} - {} = {}'.format(n1,n2,s)).pack()

def multi():
    n1=float(a.get())
    n2=float(b.get())
    s=n1*n2
```

```
    Label(root,text='{} * {} = {}'.format(n1,n2,s)).pack()

def div():
    n1=float(a.get())
    n2=float(b.get())
    s=n1/n2
    Label(root,text='{} / {} = {}'.format(n1,n2,s)).pack()

def modulo():
    n1=float(a.get())
    n2=float(b.get())
    s=n1%n2
    Label(root,text='{} % {} = {}'.format(n1,n2,s)).pack()

s=Button(root,text=' + ',command=plus)
d=Button(root,text=' - ',command=minus)
m=Button(root,text=' * ',command=multi)
di=Button(root,text=' / ',command=div)
mod=Button(root,text=' % ',command=modulo)
s.pack()
d.pack()
m.pack()
di.pack()
mod.pack()
root.title('First Calculator')
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 fun():
Button(root,text=’ok’,command=fun1).pack()
def fun1():
Label(root,text=Nice Job).pack()
Button(root,text=’ok’,command=fun).pack()
root.mainloop()
```

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

```
from tkinter import *
root=Tk()
pri=Label(root,text='Enter Principle Amount($):-')
pri.pack()
```

```
p=Entry(root)
p.pack()
roi=Label(root,text='Enter Rate of Interest(%):-')
roi.pack()
r=Entry(root)
r.pack()
time=Label(root,text='Enter Time(Years):-')
time.pack()
t=Entry(root)
t.pack()
def SI():
    root.bell()
    a=float(p.get())
    b=float(r.get())
    c=float(t.get())
    si=a*b*c/100
    ans=Label(root,text='Simple Interest is ${}'.format(si))
    ans.pack()
calculate=Button(root,text='Calculate',command=SI)
calculate.pack()
root.title('Simple Interest Calculator')
root.mainloop()
```

# Lab Exercise 10: Tkinter

# Lab Exercise 11: Tkinter-2

1. See the video clip of the project available in project folder on the server.
2. Create first GUI window containing image, project title, details of the student etc. Use the image available in the project folder.
3. Create second GUI window as shown in video clip.
4. Create third GUI window shown in video clip.
5. Create fourth GUI window shown in video clip, use home image on the button.
6. Create GUI windows for shown video clip (Project) adding all the required components including radio buttons, and drop down menu wherever needed.
7. Add Popup functionality to validate all the input fields.
8. Display appropriate messages through Popup to give relevant information / error to the user.
9. Pops must cover all inputs validations i.e. input through radio buttons, dropdown menu, and entries.



→
```
from tkinter import *
root = Tk()
h,w=root.winfo_screenheight(),root.winfo_screenwidth()
root.geometry('%dx%d+0+0'%(w,h))

root.title('lets try with the bus')
#root.geometry('1000x600')
bus=PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
#Label(root, image=bus).pack()
#def change_color():
   #Label.config(bg= "gray51", fg= "white")

Label(root, image=bus).grid(row=0,column=0,columnspan=10,padx=w//2.5)
Label(root, text="Online Bus Booking System",font=("Arial", 30,"bold"),bg=
"sky blue", fg= "red2").grid(row=1,column=1,columnspan=10,padx=w//3)
name = Label(root,text = "Name : Arin Jain",font=("Arial, 20"),fg="medium
blue").grid(row=5,column=5,padx=5,pady=40)
Enrollment = Label(root,text = "Er : 211B392",font=("Arial, 20"),fg="medium
blue").grid(row=7,column=5,padx=5,pady=10)
Mobile = Label(root,text = "Mobile : 6375244746",font=("Arial,
20"),fg="medium blue").grid(row=9,column=5,padx=5,pady=40)
submitted = Label(root, text="Submitted to : Dr. Mahesh
```

```
Kumar",font=("Arial", 25,"bold"),bg= "sky blue", fg=
"red2").grid(row=11,column=5,padx=w//3)
Project = Label(root,text = "Project Based Learning",font=("Arial,
20"),fg="red2").grid(row=13,column=5,padx=5,)

#name = Label(root,text="Name : Arin Jain").grid(row=3,column=3)
def close(e=0):
    root.destroy()
    import Home_page
root.bind('<KeyPress>',close)
root.mainloop()
```

→

```
from tkinter import *
root = Tk()
h,w=root.winfo_screenheight(),root.winfo_screenwidth()
root.geometry('%dx%d+0+0'%(w,h))

root.title('Seat Booking Page')
bus=PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
Label(root, image=bus).grid(row=0,column=0,columnspan=10,padx=w//2.5)
Label(root, text="Online Bus Booking System",font=("Arial", 30,"bold"),bg=
"sky blue", fg= "red2").grid(row=1,column=1,columnspan=10,padx=w//3)


def gobbook():
    root.destroy()
    import Bus_Booking


def checkbooking():
    root.destroy()
    import Check_Your_Booking


def addbusdetail():
    root.destroy()
    import Add_New_detail_Database

seat_booking = Button(root, text = 'Seat Booking',font=("Arial", 25,),bg=
"pale green", fg= "gray5",command=gobbook).grid(row=3,column=3,pady=70)
check  = Button(root, text = 'Checked Booked Seat',font=("Arial", 25),bg=
"lime green", fg=
"gray5",command=checkbooking).grid(row=3,column=5,pady=70)
Add_detail = Button(root, text = 'Add Bus Detail',font=("Arial", 25), fg=
"gray5",command=addbusdetail).grid(row=3,column=7,pady=70)
admins_only = Label(root, text='For Admin Only',font=("Arial", 20), fg=
"red2").grid(row=4,column=7)
root.mainloop()
```

→

```
from tkinter import *
from tkinter.messagebox import *

root = Tk()
w, h = root.winfo_screenwidth(), root.winfo_screenheight()
root.geometry('%dx%d+0+0' % (w, h))
img = PhotoImage(file='/Users/arinjain/Desktop/GUI/bus.png')
img1 = PhotoImage(file='/Users/arinjain/Desktop/GUI/home.png')
bus = Label(root, image=img)
bus.grid(row=0, column=0, columnspan=12, padx=w // 3)
```

```
t1 = Label(root, text='Online Bus Booking System', bg='light blue',
fg='Red', font='Arial 32 bold')
t1.grid(row=1, column=0, columnspan=12, padx=w // 3)
detailtxt = Label(root, text='Enter Journey Details', fg='green4',
bg='light green', font='Arial 16 bold')
detailtxt.grid(row=2, column=0, columnspan=12, padx=w // 3, pady=20)


#Frame Creation
frame1 = Frame(root)
frame1.grid(row=3, column=0, columnspan=12)
frame2 = Frame(root)
frame2.grid(row=8, column=0, columnspan=20, pady=20)


#Improting the database
import sqlite3
con = sqlite3.connect('PYthonBusProj.db')
cur = con.cursor()

#Entries
bus_select = IntVar()
tof = Entry(frame1)
fromf = Entry(frame1)
datef = Entry(frame1)

def confirmamt():
    #if (checkerrordetails() == False):
        cur.execute("""select fare,name from bus,operator where busid={}
and bus_opid=opid""".format(bus_select.get(),bus_select.get()))

        price = cur.fetchall()
        amt = price[0][0]
        print('this is the price')
        print(amt)
        opname = price[0][1]
        with open("mobile.txt", "r+") as f:
            f.write("{}".format(int(mobilef.get())))
            print(f.read())
        ans = askquestion('Fare Confirmation', 'Total amount to be paid is
Rs {}'.format(amt * int(seatsf.get())))
        if ans == 'yes':
            cur.execute("""select DATE('now')""")
            date = cur.fetchall()
            curdate = date[0][0]
            dated = datecorrect()
            cur.execute("""insert into bookinghistory
(pname,mobile,age,seats,from_station,to_station,date_booked,gender,boarding
_date,fare,op_name)values("{}",{},{},{},"{}","{}","{}","{}","{}",{},"{}")""
".format(namef.get(), mobilef.get(), agef.get(), seatsf.get(), fromf.get(),
tof.get(), curdate, sex_mf.get(),dated, amt, opname))
            cur.execute("""update runs set seat_available=seat_available-{}
where runs_busid={}""".format(int(seatsf.get()),bus_select.get()))
            con.commit()
            root.destroy()
            import ticket_booked
        else:
            return


#Date Correction
```

```
def datecorrect():
    olddate = datef.get()
    newdate = olddate[6:] + '-' + olddate[3:5] + '-' + olddate[:2]
    return newdate


def showbuses():
    #if (checkerrortofromdate() == False):
        frame = Frame(root)
        frame.grid(row=5, column=0, columnspan=12)
        dated = datecorrect()

        cur.execute(
            """select
op.name,b.bus_type,r.seat_available,b.capacity,b.fare,b.bus_opid,st.stid as
start_st,ed.stid as end_st from operator as op,bus as b,route as st,route
as ed,runs as r
            where r.runs_date='{}' and st.station_name="{}" and
ed.station_name="{}" and st.stid< ed.stid and st.rid=ed.rid and
b.bus_rid=st.rid and b.bus_opid=op.opid and r.runs_busid=b.busid""".format(
                dated, fromf.get(), tof.get()))

        f = fromf.get()
        print(f)
        t = tof.get()
        print(t)
        d = dated
        print(d)
        res = cur.fetchall()
        buses_count = len(res)

        select_bus = Label(frame, text='Select Bus', fg='green3',
font='Arial 14 bold')
        op = Label(frame, text='Operator', fg='green3', font='Arial 14')
        bus_type = Label(frame, text='Bus Type', fg='green3', font='Arial
14')
        avail = Label(frame, text='Available/Capacity', fg='green3',
font='Arial 14')
        fare = Label(frame, text='Fare', fg='green3', font='Arial 14')
        bookproceed = Button(frame, text='Proceed to book', bg='light
green', font='Arial 14', command=proceedtobook)

        if buses_count == 0:
            showerror('No BUS', 'NO BUSES FOUND')
            return
        i = 0
        for i in range(0, buses_count):
            Radiobutton(frame, text='Bus' + str(i + 1),
variable=bus_select, value=res[i][5]).grid(row=5 + i, column=1)
            Label(frame, text=res[i][0], font='Arial 12',
fg='blue').grid(row=5 + i, column=2)
            Label(frame, text=res[i][1], font='Arial 12',
fg='blue').grid(row=5 + i, column=3)
            Label(frame, text=str(res[i][2]) + '/' + str(res[i][3]),
font='Arial 12', fg='blue').grid(row=5 + i, column=4)

            Label(frame, text=res[i][4], font='Arial 12',
fg='blue').grid(row=5 + i, column=5)

        select_bus.grid(row=4, column=1, padx=5)
        op.grid(row=4, column=2, padx=5)
```

```
        bus_type.grid(row=4, column=3, padx=5)
        avail.grid(row=4, column=4, padx=5)
        fare.grid(row=4, column=5, padx=5)
        bookproceed.grid(row=6 + i, column=7)


filldetail = Label(frame2, text='Fill Passenger Details to book the bus
ticket', bg='light blue', fg='Red',font='Arial 24 bold')
name = Label(frame2, text='Name', font='Arial 14 bold')
sex = Label(frame2, text='Gender', font='Arial 14 bold')
sex_mf = StringVar()
sex_mf.set('--M/F--')
option = ['Male', 'Female', 'Other']
s_menu = OptionMenu(frame2, sex_mf, *option)
seats = Label(frame2, text='No of Seats', font='Arial 14 bold')
mobile = Label(frame2, text='Mobile No', font='Arial 14 bold')
age = Label(frame2, text='Age', font='Arial 14 bold')
namef = Entry(frame2)
seatsf = Entry(frame2)
mobilef = Entry(frame2)
agef = Entry(frame2)


def proceedtobook():
    if bus_select.get() == 0:
        showerror('SELECT ERROR', 'NO BUS SELECTED')
    else:
        bookseat = Button(frame2, text='Book Seat', bg='light green',
font='Arial 14', command=confirmamt)
        dated = datecorrect()
        cur.execute("""select b.fare,b.bus_opid,st.stid as start_st,ed.stid
as end_st from bus as b,route as st,route as ed,runs as r where
r.runs_date='{}' and st.stid="{}" and ed.stid="{}" and st.station_name<
ed.station_name and st.rid=ed.rid and b.busid={}""".format(dated,
fromf.get(), tof.get(), bus_select.get()))
        bus_detail = cur.fetchall()
        filldetail.grid(row=7, column=0, columnspan=20, pady=15)
        name.grid(row=8, column=1)
        namef.grid(row=8, column=2)
        sex.grid(row=8, column=3)
        s_menu.grid(row=8, column=4)
        seats.grid(row=8, column=5)
        seatsf.grid(row=8, column=6)
        mobile.grid(row=8, column=7)
        mobilef.grid(row=8, column=8)
        age.grid(row=8, column=9)
        agef.grid(row=8, column=10)
        bookseat.grid(row=8, column=11)


'''def checkerrortofromdate():
    if fromf.get() == '':
        showerror('Error', 'Source Empty')
        return True
    elif tof.get() == '':
        showerror('Error', 'Destination Empty')
        return True
    elif datef.get() == '':
        showerror('Error', 'Date Empty')
        return True
    else:
```

```
        return False'''


'''def checkerrordetails():
    if namef.get() == '':
        showerror('Error', 'Name Empty')
        return True
    elif sex_mf == '':
        showerror('Error', 'No Gender Selected')
        return True
    elif mobilef.get() == '':
        showerror('Error', 'No Mobile No Entered')
        return True
    elif agef.get() == '':
        showerror('Error', 'No Age Entered')
        return True
    elif seatsf.get() == '':
        showerror('Error', 'No Seats Entered')
        return True
    else:
        return False'''


def takehome():
    root.destroy()
    import Home_page


to = Label(frame1, text='To', font='Arial 12')
From = Label(frame1, text='From', font='Arial 12')
date = Label(frame1, text='Journey Date', font='Arial 12')
show = Button(frame1, text='Show Bus', command=showbuses, bg='SeaGreen1',
font='Arial 16 bold')
home = Button(frame1, image=img1, bg='light green', command=takehome)

to.grid(row=3, column=1, sticky=E, padx=10)
tof.grid(row=3, column=2, sticky=W, padx=10)
From.grid(row=3, column=3, sticky=E, padx=10)
fromf.grid(row=3, column=4, sticky=W, padx=10)
date.grid(row=3, column=5, sticky=E, padx=10)
datef.grid(row=3, column=6, sticky=W, padx=10)
show.grid(row=3, column=7, padx=10)
home.grid(row=3, column=8, padx=10)

root.title('Booking Window')
root.mainloop()
```

→

```
from tkinter import *
from tkinter.messagebox import *

root = Tk()
w, h = root.winfo_screenwidth(), root.winfo_screenheight()
root.geometry('%dx%d+0+0' % (w, h))

'''def getvals():
    if len(mobf.get())!=10:
        showerror('phoneno','mobile number not valid')
    op1 = Label(root, text='Ticket Here', font='Arial 12')
    op1.grid(row=4, columnspan=20, padx=w // 3, )
    print(f"{mobf.get()} ")'''
```

```
with open("mobile.txt", "r") as f:
    #print(f.read())
    mob = f.read()
print(mob)
print('hi')
import sqlite3

con = sqlite3.connect('PYthonBusProj.db')
cur = con.cursor()

frame1 = Frame(root,relief='groove',bd=5)
frame1.grid(row=4, column=4, columnspan=12,pady=20)

img = PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
img1 = PhotoImage(file="/Users/arinjain/Desktop/GUI/home.png")
bus = Label(root, image=img)
bus.grid(row=0, column=0, columnspan=20, padx=w // 3)
t1 = Label(root, text='Online Bus Booking System', bg='light blue',
fg='Red', font='Arial 32 bold')
t1.grid(row=1, column=0, columnspan=20, padx=w // 3)
t2 = Label(root, text='Your Bus Booking', bg='SpringGreen2', fg='green4',
font='Arial 22 bold')
t2.grid(row=2, column=0, columnspan=20, padx=w // 3, pady=20)




cur.execute("SELECT * FROM bookinghistory where
mobile={}".format(int(mob)))
f=cur.fetchall()
print(f)
passe='Passenger Name:'+str(f[0][0])
gender='gender:'+str(f[0][8])
nofs='No. of Seats:'+str(f[0][3])
mob='Phone:'+str(f[0][1])
age='Age:'+str(f[0][2])
Fare='Fare:'+str(f[0][10])
refno='Booking No.:'+str(f[0][8])
oper='Bus Detail:'+str(f[0][11])
travd='Travel Date:'+str(f[0][9])
bookd='Booking Date:'+str(f[0][6])
desti='Destination:'+str(f[0][5])
bp='Boarding Point:'+str(f[0][4])
Label(frame1,text=passe,fg='grey5',font='Arial 15
bold').grid(row=4,column=0)
Label(frame1,text=nofs,fg='grey5',font='Arial 15
bold').grid(row=5,column=0)
Label(frame1,text=age,fg='grey5',font='Arial 15 bold').grid(row=6,column=0)
Label(frame1,text=refno,fg='grey5',font='Arial 15
bold').grid(row=7,column=0)
Label(frame1,text=travd,fg='grey5',font='Arial 15
bold').grid(row=8,column=0)
Label(frame1,text=bp,fg='grey5',font='Arial 15 bold').grid(row=9,column=0)
Label(frame1,text=gender,fg='grey5',font='Arial 15
bold').grid(row=4,column=2)
Label(frame1,text=mob,fg='grey5',font='Arial 15 bold').grid(row=5,column=2)
Label(frame1,text=Fare,fg='grey5',font='Arial 15
bold').grid(row=6,column=2)
Label(frame1,text=oper,fg='grey5',font='Arial 15
bold').grid(row=7,column=2)
```

```
Label(frame1,text=bookd,fg='grey5',font='Arial 15
bold').grid(row=8,column=2)
Label(frame1,text=desti,fg='grey5',font='Arial 15
bold').grid(row=9,column=2)

Label(frame1,text='* Total amount Rs to be paid at the time of boarding the
bus',fg='grey5',font='Arial 15').grid(row=11,columnspan=20,column=0)

print(gender)
print(passe)
root.mainloop()
```

→

```
from tkinter import *
from tkinter.messagebox import *

root = Tk()
w, h = root.winfo_screenwidth(), root.winfo_screenheight()
root.geometry('%dx%d+0+0' % (w, h))

import sqlite3
con = sqlite3.connect('PYthonBusProj.db')
cur = con.cursor()


img = PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
img1 = PhotoImage(file="/Users/arinjain/Desktop/GUI/home.png")
bus = Label(root, image=img)
bus.grid(row=0, column=0, columnspan=20, padx=w // 3)
t1 = Label(root, text='Online Bus Booking System', bg='light blue',
fg='Red', font='Arial 32 bold')
t1.grid(row=1, column=0, columnspan=20, padx=w // 3)
t2 = Label(root, text='Add Bus Details', bg='gray20', fg='green3',
font='Arial 22 bold')
t2.grid(row=2, column=0, columnspan=20, padx=w // 3, pady=20)



def getvals():

    cur.execute("""insert into bus
(busID,bus_type,bus_opid,capacity,fare,bus_rid)values({},'{}',{},{},{},{})"
"".format(busid_f.get(), clicked.get(), opid_f.get(), CapacitY_f.get(),
farE_f.get(), opid_f.get(),Routeid_f.get()))
    con.commit()

    op1 = Label(root,text='{} {} {} {} {} {}'.format(busid_f.get(),
clicked.get(), CapacitY_f.get(), farE_f.get(),
opid_f.get(),Routeid_f.get()),font='Arial 12')


    op1.grid(row=4, columnspan=13)
    showinfo('Operator Entry Updated', 'Bus Details updated successfully')


    print(f"{busid_f.get(),clicked.get(),  CapacitY_f.get(), farE_f.get(),
opid_f.get(),Routeid_f.get()} ")

    with open("add_busdetail.txt", "a") as f:
        f.write(f"{busid_f.get(), clicked.get(),  CapacitY_f.get(),
farE_f.get(), opid_f.get(),Routeid_f.get()}\n ")
```

```
busid = Label(root, text='Bus ID', font='Arial 14')
bustype = Label(root, text='Bus type', font='Arial 14')
CapacitY = Label(root, text='Capacity', font='Arial 14')
farE = Label(root, text='Fare Rs', font='Arial 14')
opid = Label(root, text='Operator ID', font='Arial 14')
Routeid = Label(root, text='Route ID', font='Arial 14')


options = [
        "AC 2x2",
        "AC 3x2",
        "Non AC 2x2",
        "Non AC 3x2",
        "AC-Sleeper 2x1",
        "Non AC-Sleeper 2x1"
    ]
clicked = StringVar()
clicked.set("Bus Type")
drop = OptionMenu(root, clicked, *options)

# Tkinter variable for storing entries
busid_f = StringVar()
Routeid_f = StringVar()
CapacitY_f = StringVar()
farE_f = StringVar()
opid_f = StringVar()

#Entries for our form
busid_f = Entry(root, textvariable=busid_f)
Routeid_f = Entry(root, textvariable=Routeid_f)
CapacitY_f = Entry(root, textvariable=CapacitY_f)
farE_f = Entry(root, textvariable=farE_f)
opid_f = Entry(root, textvariable=opid_f)


def checking():
    cur.execute("SELECT * FROM bus")
    f=cur.fetchall()
    print(f)

def addnew():
    op1 = Label(root, text='{} {} {} {}
{}'.format(busid_f.get(),clicked.get(), CapacitY_f.get(), farE_f.get(),
opid_f.get(), Routeid_f.get()),
                font='Arial 12')
    op1.grid(row=4, columnspan=13)
    showinfo('Operator Entry Updated', 'Bus Details updated successfully')

addb = Button(root, text='Add Bus', bg='SpringGreen2', font='Arial 14',
command=getvals)
eb = Button(root, text='Edit Bus', bg='SpringGreen2', font='Arial 14')
home = Button(root, image=img1, bg='light green')

#check_db = Button(root, text='Check', bg='SpringGreen2', font='Arial 14',
command=checking)
#check_db.grid(row=10, column=11)

busid.grid(row=3, column=1)
busid_f.grid(row=3, column=2)
```

```
bustype.grid(row=3, column=3)
drop.grid(row=3, column=4)
CapacitY.grid(row=3, column=5)
CapacitY_f.grid(row=3, column=6)
farE.grid(row=3, column=7)
farE_f.grid(row=3, column=8)
opid.grid(row=3, column=9)
opid_f.grid(row=3, column=10)
Routeid.grid(row=3, column=11)
Routeid_f.grid(row=3, column=12)
addb.grid(row=5, column=7)
eb.grid(row=5, column=8)
home.grid(row=5, column=9)

root.mainloop()
```

→

```
from tkinter import *
from tkinter.messagebox import *

root = Tk()
w, h = root.winfo_screenwidth(), root.winfo_screenheight()
root.geometry('%dx%d+0+0' % (w, h))

img = PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
img1 = PhotoImage(file="/Users/arinjain/Desktop/GUI/home.png")
bus = Label(root, image=img)
bus.grid(row=0, column=0, columnspan=20, padx=w // 3)
t1 = Label(root, text='Online Bus Booking System', bg='light blue',
fg='Red', font='Arial 32 bold')
t1.grid(row=1, column=0, columnspan=20, padx=w // 3)
t2 = Label(root, text='Add Bus Operator Details', bg='white smoke',
fg='green3', font='Arial 22 bold')
t2.grid(row=2, column=0, columnspan=20, padx=w // 3, pady=20)

import sqlite3

con = sqlite3.connect('PYthonBusProj.db')
cur = con.cursor()


def getvals():

    cur.execute("""insert into operator
(opid,name,phone,address,email)values({},'{}',{},'{}','{}')""".format(int(f
loat(opf.get())), nf.get(), int(phf.get()), addf.get(), mf.get()))
    con.commit()

    op1 = Label(root, text='{} {} {} {} {}'.format(opf.get(), nf.get(),
addf.get(), phf.get(), mf.get()),
                font='Arial 12')
    op1.grid(row=4, columnspan=13)
    showinfo('Operator Entry Updated', 'Operator Record updated
successfully')

    print(f"{opf.get(), nf.get(), addf.get(), phf.get(), mf.get()} ")

    with open("operator_detail.txt", "a") as f:
        f.write(f"{opf.get(), nf.get(), addf.get(), phf.get(), mf.get()}\n
")
```

```
opid = Label(root, text='Operator ID', font='Arial 14')
name = Label(root, text='Name', font='Arial 14')
add = Label(root, text='Address', font='Arial 14')
ph = Label(root, text='Phone', font='Arial 14')
mail = Label(root, text='Email', font='Arial 14')



# Tkinter variable for storing entries
opf = StringVar()
nf = StringVar()
addf = StringVar()
phf = StringVar()
mf = StringVar()

#Entries for our form

opf = Entry(root, textvariable=opf)
nf = Entry(root, textvariable=nf)
addf = Entry(root, textvariable=addf)
phf = Entry(root, textvariable=phf)
mf = Entry(root, textvariable=mf)


def checking():
    cur.execute("SELECT * FROM operator")
    f=cur.fetchall()
    print(f)


def addnew():
    op1 = Label(root, text='{} {} {} {} {}'.format(opf.get(), nf.get(),
addf.get(), phf.get(), mf.get()),
                font='Arial 12')
    op1.grid(row=4, columnspan=13)
    showinfo('Operator Entry Updated', 'Operator Record updated
successfully')


addb = Button(root, text='Add', bg='SpringGreen2', font='Arial 14',
command=getvals)
eb = Button(root, text='Edit', bg='SpringGreen2', font='Arial 14')

#check_db = Button(root, text='Check', bg='SpringGreen2', font='Arial 14',
command=checking)
#check_db.grid(row=10, column=11)

def takehome():
    root.destroy()
    import Home_page

home = Button(root, image=img1, bg='light green', command=takehome)

opid.grid(row=3, column=1)  # stick=W or E
opf.grid(row=3, column=2)
name.grid(row=3, column=3)
nf.grid(row=3, column=4)
add.grid(row=3, column=5)
addf.grid(row=3, column=6)
ph.grid(row=3, column=7)
```

```
phf.grid(row=3, column=8)
mail.grid(row=3, column=9)
mf.grid(row=3, column=10)
addb.grid(row=3, column=11)
eb.grid(row=3, column=12)

home.grid(row=5, column=9)

root.mainloop()
```

→
```
from tkinter import *
from tkinter.messagebox import *
root = Tk()
w, h = root.winfo_screenwidth(), root.winfo_screenheight()
root.geometry('%dx%d+0+0' % (w, h))
img = PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
img1 = PhotoImage(file="/Users/arinjain/Desktop/GUI/home.png")
bus = Label(root, image=img)
bus.grid(row=0, column=0, columnspan=20, padx=w // 3)
t1 = Label(root, text='Online Bus Booking System', bg='light blue',
fg='Red', font='Arial 32 bold')
t1.grid(row=1, column=0, columnspan=20, padx=w // 3)
t2 = Label(root, text='Add Bus Route Details', bg='gray20', fg='green3',
font='Arial 22 bold')
t2.grid(row=2, column=0, columnspan=20, padx=w // 3, pady=20)
import sqlite3
con = sqlite3.connect('PYthonBusProj.db')
cur = con.cursor()
def addnew():
    '''routef.delete(0, END)
    snf.delete(0, END)
    staion_id_f.delete(0, END)'''
    cur.execute("""insert into
route(rid,stid,station_name)values({},{},"{}")""".format(routef.get(),snf.g
et(),staion_id_f.get()))
    con.commit()

    op1 = Label(root, text='{} {} {} '.format(routef.get(), snf.get(),
staion_id_f.get()),font='Arial 12')
    op1.grid(row=6, columnspan=13)
    showinfo('Operator Entry Updated', 'Bus Route Added successfully')


def checking():
    cur.execute("SELECT * FROM route")
    f=cur.fetchall()
    print(f)

Routeid = Label(root, text='Route ID', font='Arial 14')
station_name = Label(root, text='Station Name', font='Arial 14')
Station_id = Label(root, text='Station ID', font='Arial 14')

routef = Entry(root)
snf = Entry(root)
staion_id_f = Entry(root)
addb = Button(root, text='Add Route', bg='SpringGreen2', font='Arial 14',
command=addnew)
eb = Button(root, text='Delete Route', bg='SpringGreen2',fg='Red',
font='Arial 14')
```

```
#check_db = Button(root, text='Check', bg='SpringGreen2', font='Arial 14',
command=checking)
#check_db.grid(row=10, column=11)

def takehome():
    root.destroy()
    import Home_page

home = Button(root, image=img1, bg='light green', command=takehome)
Routeid.grid(row=5, column=3)
routef.grid(row=5, column=4)
station_name.grid(row=5, column=5)
snf.grid(row=5, column=6)
Station_id.grid(row=5, column=7)
staion_id_f.grid(row=5, column=8)
addb.grid(row=5, column=11)
eb.grid(row=5, column=12)
home.grid(row=8, column=9,pady=20)

root.mainloop()
```

→

```
from tkinter import *
root = Tk()
h,w=root.winfo_screenheight(),root.winfo_screenwidth()
root.geometry('%dx%d+0+0'%(w,h))
root.title('Add New Details')
bus=PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
Label(root, image=bus).grid(row=0,column=0,columnspan=20,padx=w//2.5)
Label(root, text="Online Bus Booking System",font=("Arial", 30,"bold"),bg=
"sky blue", fg= "red2").grid(row=1,column=0,columnspan=20,padx=w//3)
Label(root,text = "Add New Detail to Database",font=("Arial", 20,"bold"),
fg= "green4").grid(row=2,column=0,columnspan=20,pady=20)


def newop():
    root.destroy()
    import Add_Bus_Operator


def newbus():
    root.destroy()
    import Add_Bus_Detail


def newroute():
    root.destroy()
    import Add_Bus_Route

def newrun():
    root.destroy()
    import Bus_running_detail
New_operator = Button(root,text="New Operator",font=("Arial", 15,),bg=
"pale green", fg= "gray5",command=newop)
New_operator.grid(row=3,column=8,pady=20)
New_Bus = Button(root,text="New Bus",font=("Arial", 15,),bg= "coral", fg=
"gray5",command=newbus)
New_Bus.grid(row=3,column=9,pady=20)
New_Route = Button(root,text="New Route",font=("Arial", 15,),bg= "steel
blue", fg= "gray5",command=newroute)
```

```
New_Route.grid(row=3,column=10,pady=20)
New_Run = Button(root,text="New Run",font=("Arial", 15,),bg= "RosyBrown3",
fg= "gray5",command=newrun)
New_Run.grid(row=3,column=11,pady=20)
root.mainloop()
```

→

```
from tkinter import *
root = Tk()
h,w=root.winfo_screenheight(),root.winfo_screenwidth()
root.geometry('%dx%d+0+0'%(w,h))

root.title('Seat Booking Page')
bus=PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
Label(root, image=bus).grid(row=0,column=0,columnspan=10,padx=w//2.5)
Label(root, text="Online Bus Booking System",font=("Arial", 30,"bold"),bg=
"sky blue", fg= "red2").grid(row=1,column=1,columnspan=10,padx=w//3)
def newop():
    root.destroy()
    import Add_Bus_Operator

def newbus():
    root.destroy()
    import Add_Bus_Detail

def newroute():
    root.destroy()
    import Add_Bus_Route
def newrun():
    root.destroy()
    import Bus_running_detail

seat_booking = Button(root, text = 'New Operator',font=("Arial", 25,),bg=
"pale green", fg= "gray5",command=newop).grid(row=3,column=3,pady=70)
check  = Button(root, text = 'New Bus',font=("Arial", 25),bg= "coral", fg=
"gray5",command=newbus).grid(row=3,column=5,pady=70)
Add_detail = Button(root, text = 'New Route',font=("Arial", 25),bg= "steel
blue", fg= "gray5",command=newroute).grid(row=3,column=7,pady=70)
#admins_only = Label(root, text='For Admin Only',font=("Arial", 20), fg=
"red2").grid(row=4,column=7)
Newrun= Button(root, text = 'New Run',font=("Arial", 25),bg= "RosyBrown3",
fg= "gray5",command=newrun).grid(row=3,column=9,sticky='w',pady=70)

root.mainloop()
```

→

```
from tkinter import *
from tkinter.messagebox import *

root = Tk()
w, h = root.winfo_screenwidth(), root.winfo_screenheight()
root.geometry('%dx%d+0+0' % (w, h))
img = PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
img1 = PhotoImage(file="/Users/arinjain/Desktop/GUI/home.png")
bus = Label(root, image=img)
bus.grid(row=0, column=0, columnspan=20, padx=w // 3)
t1 = Label(root, text='Online Bus Booking System', bg='light blue',
fg='Red', font='Arial 32 bold')
t1.grid(row=1, column=0, columnspan=20, padx=w // 3)
t2 = Label(root, text='Add Bus Running Details', bg='gray20', fg='green3',
font='Arial 22 bold')
t2.grid(row=2, column=0, columnspan=20, padx=w // 3, pady=20)
```

```
def datecorrect():
    olddate = datef.get()
    newdate = olddate[6:] + '-' + olddate[3:5] + '-' + olddate[:2]
    return newdate

import sqlite3

con = sqlite3.connect('PYthonBusProj.db')
cur = con.cursor()


Busid = Label(root, text='Bus ID', font='Arial 14')
date = Label(root, text='Running Date', font='Arial 14')
avail = Label(root, text='Seat Available', font='Arial 14')

bidf = Entry(root)
datef = Entry(root)
availf = Entry(root)


def addnew():
    date = 0
    date = cur.fetchall()
    date = datecorrect()
    cur.execute("""insert into
runs(runs_busID,runs_date,seat_available)values({},'{}',{})""".format(bidf.
get(), date,

availf.get()))
    con.commit()


    op1 = Label(root, text='{} {} {} '.format(bidf.get(), datef.get(),
availf.get()),
                font='Arial 12')
    op1.grid(row=6, columnspan=13)
    showinfo('Operator Entry Updated', 'Bus Running Record updated
successfully')


def checking():
    cur.execute("SELECT * FROM runs")
    f=cur.fetchall()
    print(f)

addb = Button(root, text='Add Run', bg='SpringGreen2', font='Arial 14',
command=addnew)
eb = Button(root, text='Delete Run', bg='SpringGreen2',fg='Red',
font='Arial 14')

#check_db = Button(root, text='Check', bg='SpringGreen2', font='Arial 14',
command=checking)
#check_db.grid(row=10, column=11)

def takehome():
    root.destroy()
    import Home_page

home = Button(root, image=img1, bg='light green', command=takehome)
```

```
Busid.grid(row=5, column=3)
bidf.grid(row=5, column=4)
date.grid(row=5, column=5)
datef.grid(row=5, column=6)
avail.grid(row=5, column=7)
availf.grid(row=5, column=8)
addb.grid(row=5, column=9)
eb.grid(row=5, column=10)
home.grid(row=8, column=9,pady=20)

root.mainloop()
```

→

```
from tkinter import *
from tkinter.messagebox import *

root = Tk()
w, h = root.winfo_screenwidth(), root.winfo_screenheight()
root.geometry('%dx%d+0+0' % (w, h))

frame1 = Frame(root,relief='groove',bd=5)
frame1.grid(row=4, column=4, columnspan=12,pady=20)

import sqlite3

con = sqlite3.connect('PYthonBusProj.db')
cur = con.cursor()

def getvals():
    if len(mobf.get())==10:
        cur.execute("SELECT * FROM bookinghistory where
mobile={}".format(int(mobf.get())))
        f = cur.fetchall()
        print(f)
        passe = 'Passenger Name:' + str(f[0][0])
        gender = 'gender:' + str(f[0][8])
        nofs = 'No. of Seats:' + str(f[0][3])
        mob = 'Phone:' + str(f[0][1])
        age = 'Age:' + str(f[0][2])
        Fare = 'Fare:' + str(f[0][10])
        refno = 'Booking No.:' + str(f[0][8])
        oper = 'Bus Detail:' + str(f[0][11])
        travd = 'Travel Date:' + str(f[0][9])
        bookd = 'Booking Date:' + str(f[0][6])
        desti = 'Destination:' + str(f[0][5])
        bp = 'Boarding Point:' + str(f[0][4])
        Label(frame1, text=passe, fg='grey5', font='Arial 15
bold').grid(row=4, column=0)
        Label(frame1, text=nofs, fg='grey5', font='Arial 15
bold').grid(row=5, column=0)
        Label(frame1, text=age, fg='grey5', font='Arial 15
bold').grid(row=6, column=0)
        Label(frame1, text=refno, fg='grey5', font='Arial 15
bold').grid(row=7, column=0)
        Label(frame1, text=travd, fg='grey5', font='Arial 15
bold').grid(row=8, column=0)
        Label(frame1, text=bp, fg='grey5', font='Arial 15
bold').grid(row=9, column=0)
        Label(frame1, text=gender, fg='grey5', font='Arial 15
bold').grid(row=4, column=2)
        Label(frame1, text=mob, fg='grey5', font='Arial 15
bold').grid(row=5, column=2)
```

```
        Label(frame1, text=Fare, fg='grey5', font='Arial 15
bold').grid(row=6, column=2)
        Label(frame1, text=oper, fg='grey5', font='Arial 15
bold').grid(row=7, column=2)
        Label(frame1, text=bookd, fg='grey5', font='Arial 15
bold').grid(row=8, column=2)
        Label(frame1, text=desti, fg='grey5', font='Arial 15
bold').grid(row=9, column=2)

        Label(frame1, text='* Total amount Rs to be paid at the time of
boarding the bus', fg='grey5',
              font='Arial 15').grid(row=11, columnspan=20, column=0)

    else:

        showerror('phoneno', 'mobile number not valid')

img = PhotoImage(file="/Users/arinjain/Desktop/GUI/bus.png")
img1 = PhotoImage(file="/Users/arinjain/Desktop/GUI/home.png")
bus = Label(root, image=img)
bus.grid(row=0, column=0, columnspan=20, padx=w // 3)
t1 = Label(root, text='Online Bus Booking System', bg='light blue',
fg='Red', font='Arial 32 bold')
t1.grid(row=1, column=0, columnspan=20, padx=w // 3)
t2 = Label(root, text='Check Your Booking', bg='SpringGreen2', fg='green4',
font='Arial 22 bold')
t2.grid(row=2, column=0, columnspan=20, padx=w // 3, pady=20)

mob = Label(root, text='Enter Your mobile number :', font='Arial 12')
mobf = Entry(root)

# Tkinter variable for storing entries
#mobf = StringVar()

#Entries for our form


def checkbook():
    op1 = Label(root, text='Ticket Here', font='Arial 12')
    op1.grid(row=4, columnspan=20, padx=w // 3, )


checkb = Button(root, text='Check Booking', font='Arial 14',
command=getvals)

#, command=checkbook

mob.grid(row=3, column=8, sticky=E)  # sticky=W or E
mobf.grid(row=3, column=9, sticky=EW, padx=5)
checkb.grid(row=3, column=10, sticky=W)

root.mainloop()
```