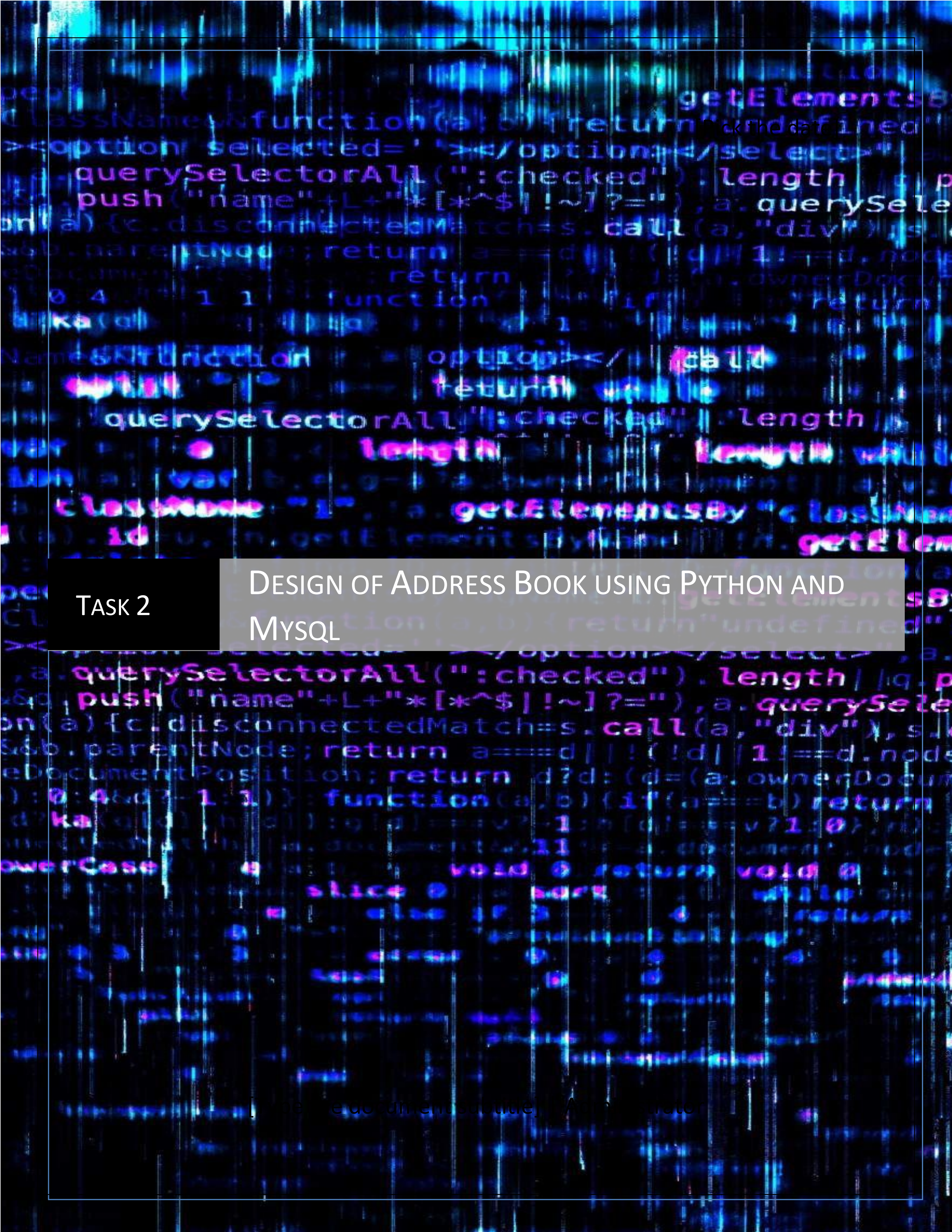


[Pick the date]

TASK 2

# DESIGN OF ADDRESS BOOK USING PYTHON AND MYSQL

[Type the document subtitle] | Administrator

**Group 2**

# Contents

# 1.Student and Project Details

## Student Details

| Name | Chinese Name | Student I.D |
|---|---|---|
| 1.Januki Manage | 江可可 | W2010816011 |
| 2.Nishali Karunarathne | 李茉莉 | W2010816013 |
| 3.Nethmi Muthugala | 娜娜 | W2010816010 |

## Project Details

Project Name: Arithmetic Operations with GUI

Major: Automation of Artificial Intelligence

Lecture’s Name: Mr. Zhu Xinjun

University: Tiangong University

# 2.Introduction

## **Address Book**

This consists of a database to store the contacts of a user under any identification name needed by the user.

This system has the basic functions as in most Address Books like Add, Delete, Update and Search. We have managed to add extra features to these basic functions. For example; when searching for a particular contact the user is given a choice to look for it either by its name, number, or the first letter(s) of the contact.

Included below are the attachments for the rest of the improvements.

Python was used as the programming language. Pycharm 2021 was the IDE used and MYSQL as the database service.

# 3. Objectives

- Finding a better solution to manage contacts
- Providing a database that enables the user to store contact details.
- Introducing new features so that Adding, Updating, Searching, and deleting data are user-friendly.
- Test the code thoroughly during the developing process to ensure proper functionality.
- Completing the project in the allocated time period

# 4. Proposed Functions

1- **Add**: Adding a new contact

2- **Delete**: Deleting an existing contact

3- **Search**: Searching for an existing contact

4- **Update**: Updating existing contacts

5- **View**: View all contacts

# 5. Newly Included Functions

**1.Search**:

➔**By Name**: Search contact by name

➔**By Number**: Search contact by number

➔**By Letter(s):** Search contact by the first letter(s) of the contact

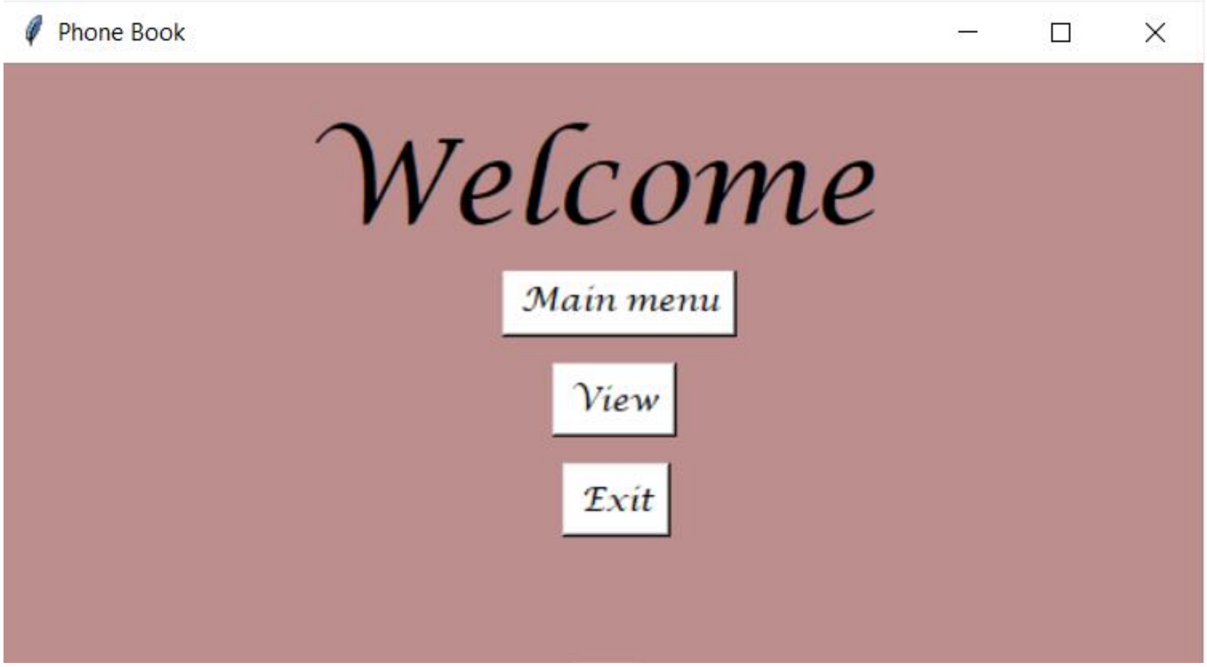
**2.View**:

➔ **Recently Added Order:** View contacts in the order of recently updated

➔ **Alphabetical Order:** View contacts in alphabetical order

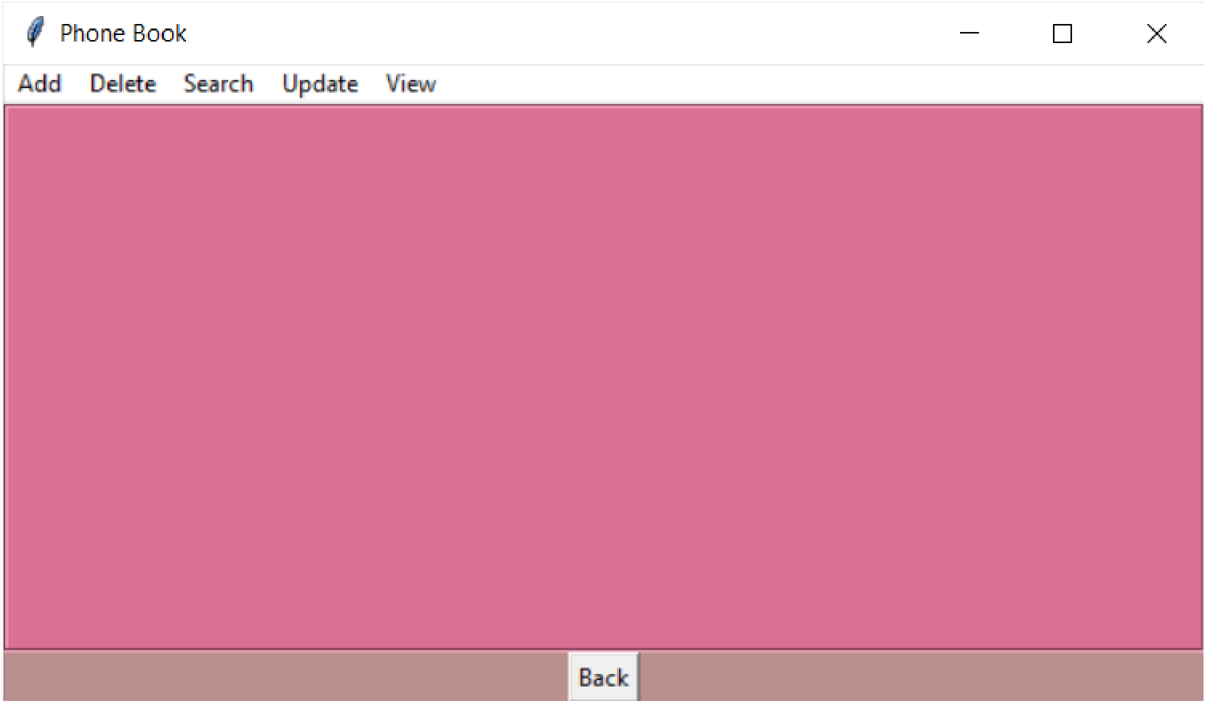
# 6. The Program

## Welcome Page



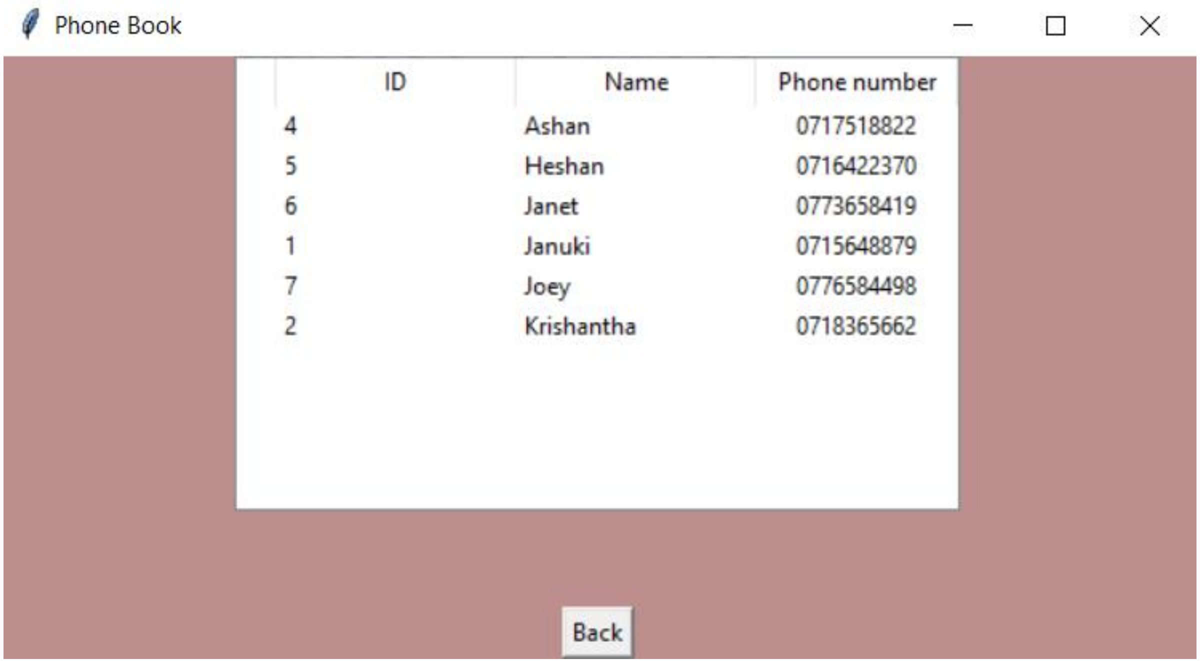
```
button1 = Button(window,text="Main menu",font=('Lucida
Calligraphy', 12), bg='white',
command=mainmenu).place(x=250,y=100)

button2 = Button(window,text="View",font=('Lucida Calligraphy',
12), bg='white', command=viewdb).place(x=275,y=150)

button3 = Button(window,text="Exit",font=('Lucida Calligraphy',
12), bg='white', command=window.destroy).place(x=280,y=200)

Label(window, text="Welcome", font="{Lucida Calligraphy}
45",bg="#BC8F8F").place(x=150,y=20) ##DB7093
```

# Main Menu



```
button1 = Button(window,text="Main menu",font=('Lucida
Calligraphy', 12), bg='white',
command=mainmenu).place(x=250,y=100)
```

## View



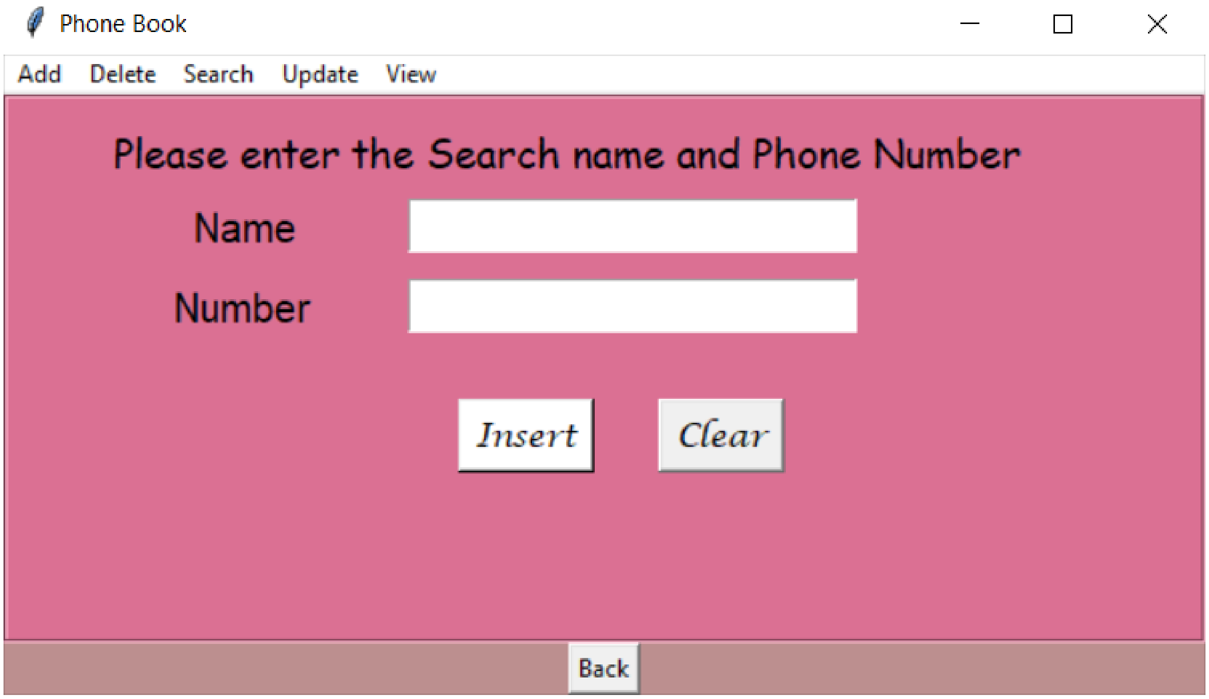
| ID | Name | Phone number |
|---|---|---|
| 4 | Ashan | 0717518822 |
| 5 | Heshan | 0716422370 |
| 6 | Janet | 0773658419 |
| 1 | Januki | 0715648879 |
| 7 | Joey | 0776584498 |
| 2 | Krishantha | 0718365662 |

```
button2 = Button(window,text="View",font=('Lucida Calligraphy',
12), bg='white', command=viewdb).place(x=275,y=150)
```

## Exit

```
button3 = Button(window,text="Exit",font=('Lucida Calligraphy',
12), bg='white', command=window.destroy).place(x=280,y=200)
```

# Add



Please enter the Search name and Phone Number

```
def click1():
       clear()

       def ConnectDB():
           Name = t1.get()
           Number = t2.get()
                     try:
               sql = "INSERT INTO newtable(Name, Number) VALUES (%s,%s)"
               val = (Name, Number)
```

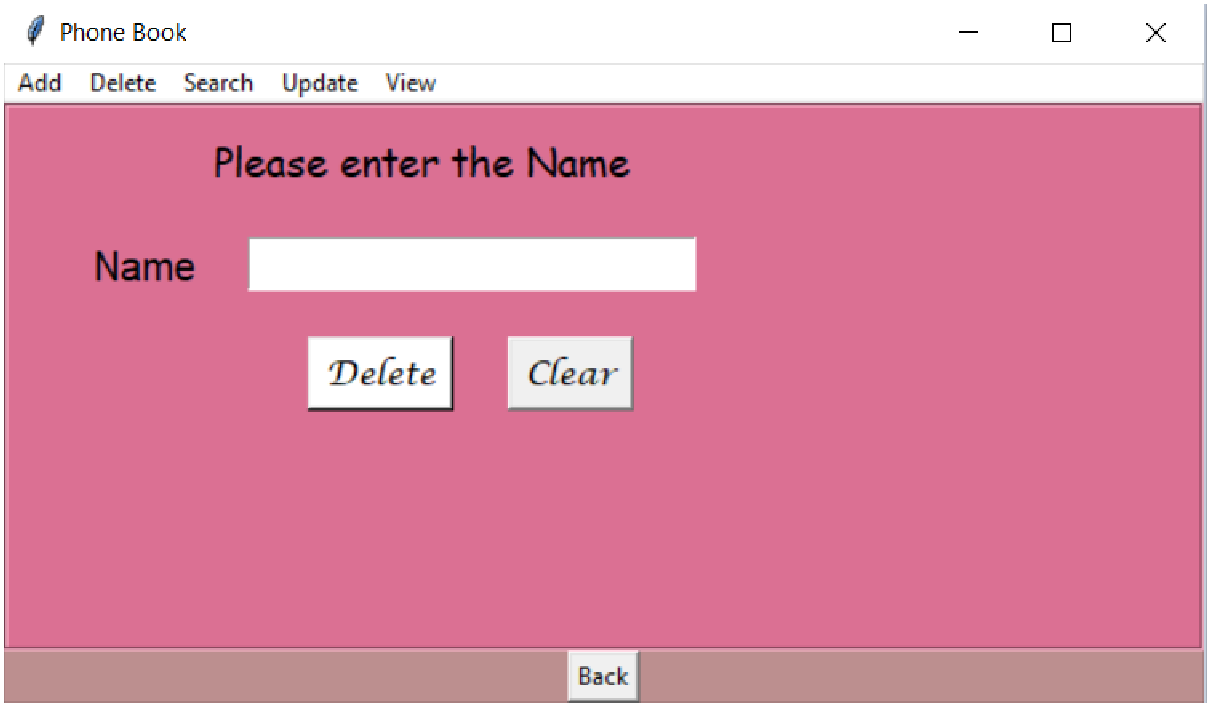
code continued

```
 cursor.execute(sql, val)
               mydb.autocommit(True)


               messagebox.showinfo("Status", "Record inserted
successfully")


           except Exception as e:
               print(e)
               mydb.rollback()
               mydb.commit()
               messagebox.showinfo("Status", "Please insert a
value!")


               #mydb.close()



       global t1
       global t2


       Label(frame, text="Please enter the Search name and Phone
Number",font="{Comic Sans MS}",bg="#DB7093").place(x=50, y=10)
##BC8F8F
       Label(frame,  text='Name',font=15,bg="#DB7093").place(x=90,
y=50)
       Label(frame,
text='Number',font=15,bg="#DB7093").place(x=80, y=90)


       t1 = Entry(frame,font=15)
       t1.place(x=200,y=50)
```

code continued

```
        t2 = Entry(frame,font=15)

        t2.place(x=200,y=90)



        insert = Button(frame, text='Insert',font=('Lucida
Calligraphy', 12),
bg='white',command=ConnectDB).place(x=225,y=150)

        button2 = Button(frame, text="Clear",font=('Lucida
Calligraphy', 12), command=clear).place(x=325,y=150)
```

## Delete



Please enter the Name

Name

**Code on next page**

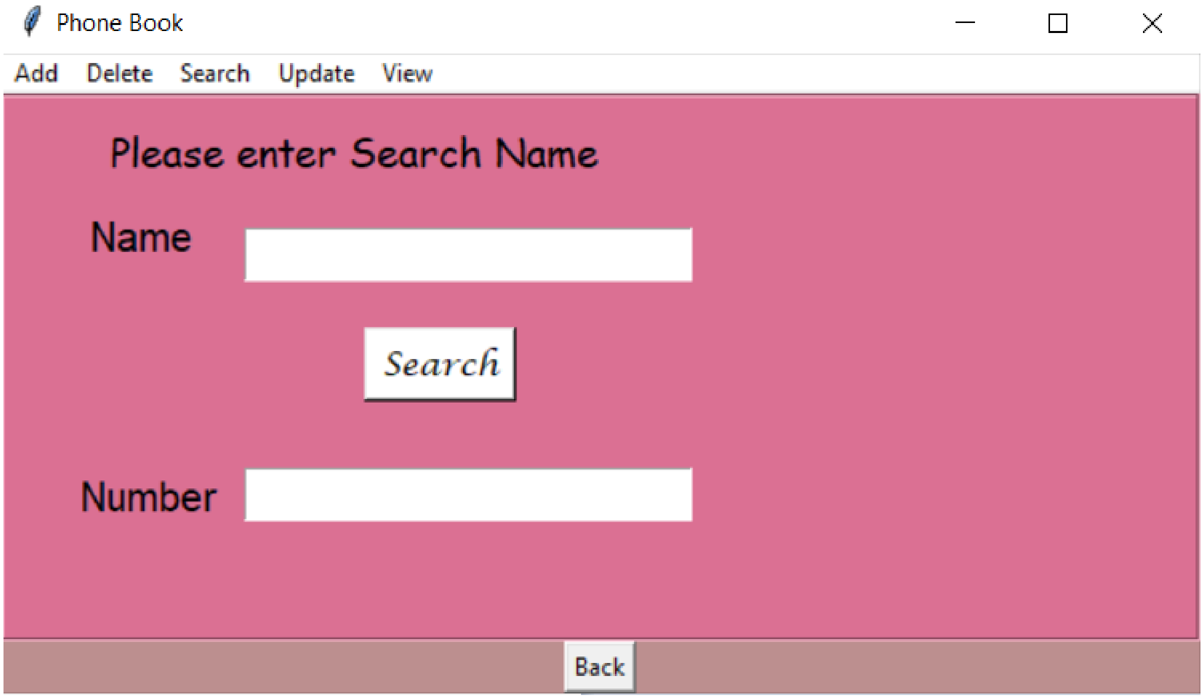
```
def click3():
    clear()


    Label(frame, text="Please enter the Name", font="{Comic Sans
MS}",bg="#DB7093").place(x=100,y=10)



    def Delete():
        Name = t1.get()


        db = mysql.connector.connect(host="localhost",
user="root", password="Ns3286463", database="contactnumbers")
        mycursor = db.cursor()


        try:


            val = (Name)
            mycursor.execute("DELETE FROM newtable WHERE Name=%s",
(val,))
            db.commit()
            messagebox.showinfo("Status", "Record deleted
successfully")


        except Exception as e:
            #print(e)
            db.rollback()
            messagebox.showinfo("Status", "Please insert a
value!")
```

code continued

```
global t1


   Label(frame,
text='Name',font=15,bg="#DB7093").place(x=40,y=65)


   t1 = Entry(frame,font=15)

  t1.place(x=120,y=65)


     delete = Button(frame, text='Delete', font=('Lucida
Calligraphy', 12), bg='white', command=Delete)

   delete.place(x=150,y=115)

   button2 = Button(frame, text="Clear",font=('Lucida
Calligraphy', 12), command=clear).place(x=250,y=115)
```

# Search

- **By Name**



```
def click2():
    clear()

    def Search():
        x = name_textbox.get()
        y = number_textbox.get()
        mycursor = mydb.cursor()
        sqlquery = "SELECT * FROM newtable where Name='" + x
+ "'"
```

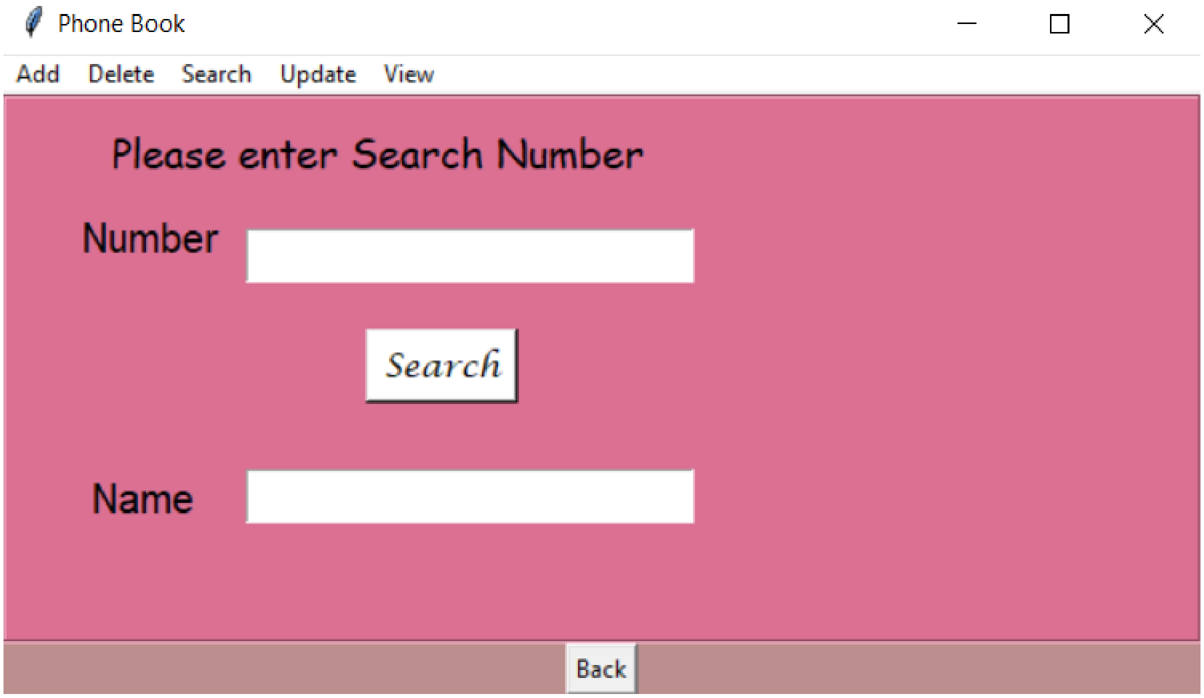
code continued

```
mycursor.execute(sqlquery)
       results = mycursor.fetchall()

       try:
           for i in results:
               print(i)
               number_textbox.delete(0, END)
               number_textbox.insert(END, i[2])
               mydb.commit()

       except Exception as e:
           #print(e)
           mydb.rollback()

   Label(frame,text="Please enter Search Name",font="{Comic Sans MS}",bg="#DB7093").place(x=50, y=10)

   name = Label(frame, text='Name',font=15,bg="#DB7093")
   name.place(x=40, y=55)

   number  = Label(frame,  text='Number',font=15,bg="#DB7093")
   number.place(x=35, y=185)

   name_textbox = Entry(frame,font=15)
   name_textbox.place(x=120,y=65)
```

code continued

```
number_textbox = Entry(frame,font=15)
   number_textbox.place(x=120, y=185)


   search_button = Button(frame, text='Search',
font=('Lucida Calligraphy', 12), bg='white', command=Search)
   search_button.place(x=180,y=115)
```

- **By Number**



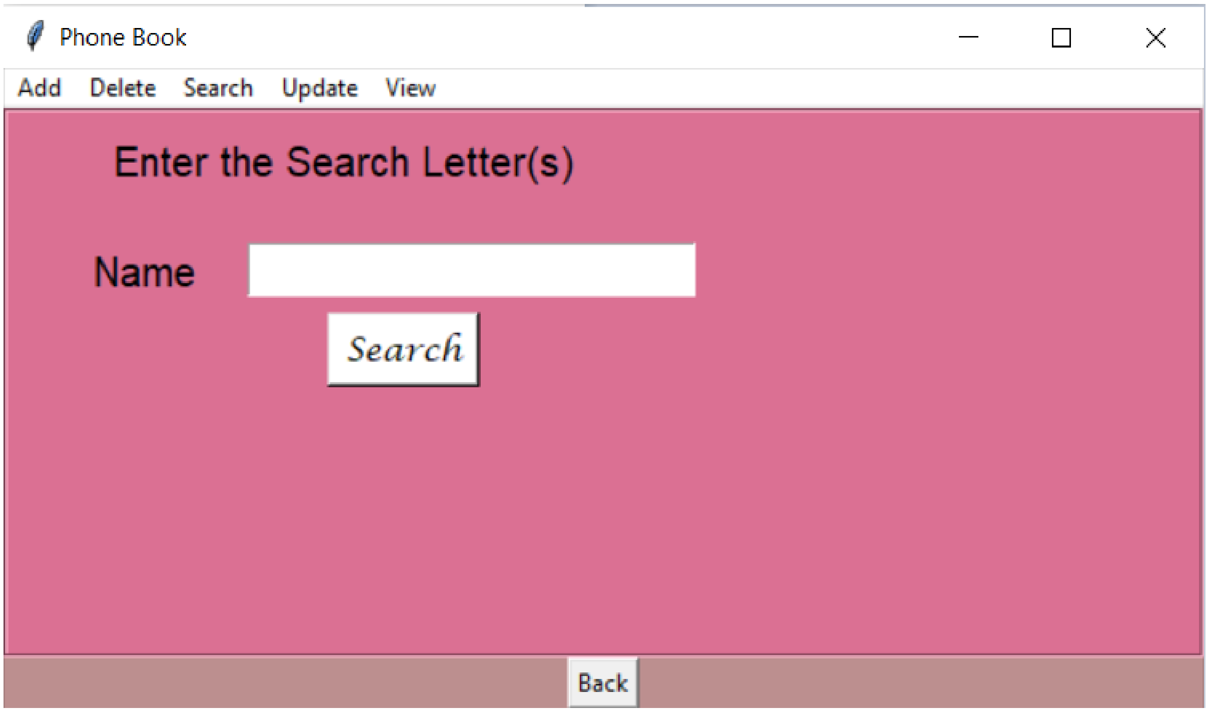
code on next page

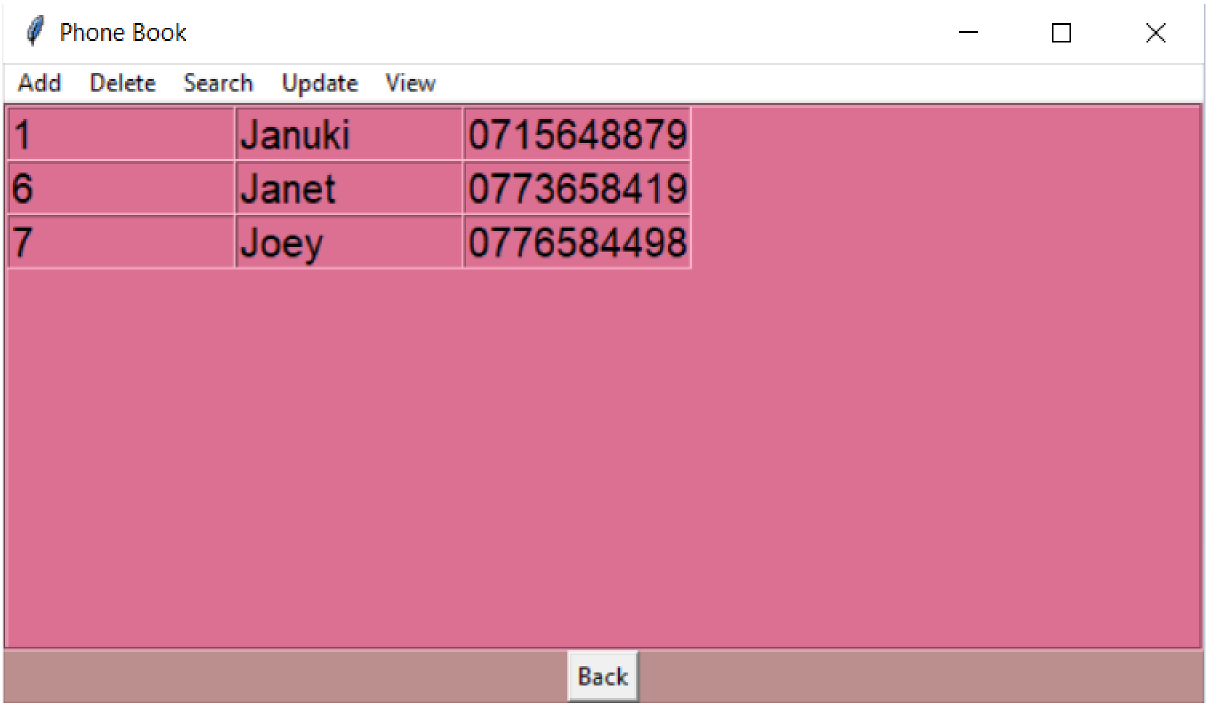
```
def click02():
   clear()

   def Search():
       x = name_textbox.get()
       y = number_textbox.get()
       mycursor = mydb.cursor()
       sqlquery = "SELECT * FROM newtable where Number='" + y +
"'"
       mycursor.execute(sqlquery)
       results = mycursor.fetchall()

       try:
           for i in results:
               print(i)
               name_textbox.delete(0, END)
               name_textbox.insert(END, i[1])
               mydb.commit()

       except Exception as e:
           #print(e)
           mydb.rollback()

   Label(frame,text="Please enter Search Number",font="{Comic
Sans MS}",bg="#DB7093").place(x=50, y=10)
```

code continued

```
name = Label(frame, text='Name',font=15,bg="#DB7093")

   name.place(x=40, y=185)


   number = Label(frame, text='Number',font=15,bg="#DB7093")

   number.place(x=35, y=55)


   name_textbox = Entry(frame,font=15)

   name_textbox.place(x=120, y=185)


   number_textbox = Entry(frame,font=15)

   number_textbox.place(x=120, y=65)


   search_button = Button(frame, text='Search',font=('Lucida
Calligraphy', 12), bg='white', command=Search)

   search_button.place(x=180, y=115)
```

- **By Letter(s)**





| | | |
|---|---|---|
| 1 | Januki | 0715648879 |
| 6 | Janet | 0773658419 |
| 7 | Joey | 0776584498 |

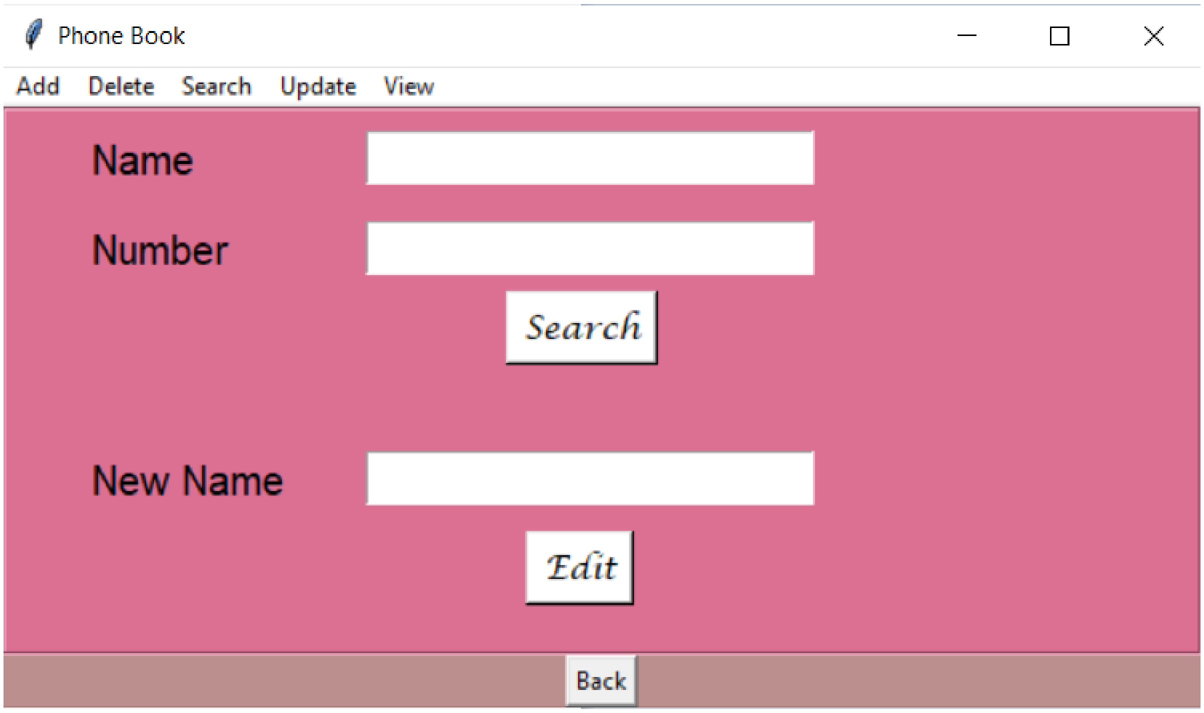
## code

```
def click002():
    clear()
    def Search():
        x = name_textbox.get()
        mycursor = mydb.cursor()
        sqlquery = "SELECT * FROM newtable WHERE name Like
'" + x + "%'"
        i = 0

        mycursor.execute(sqlquery)
        results = mycursor.fetchall()

        try:
            for p in results:
                for j in range(len(p)):
                    print(p)
                    e = Entry(frame,
width=10,font=10,bg="#DB7093")
                    e.grid(row=i, column=j)
                    e.insert(END, p[j])
                    mydb.commit()
                i = i + 1

                name_textbox.destroy()
                name.destroy()
                search_button.destroy()
```

code continued

```
       except Exception as e:

           print(e)

           mydb.rollback()


   Label(frame,text="Enter the Search
Letter(s)",font=15,bg="#DB7093").place(x=50,y=10)


   name = Label(frame, text='Name',font=15,bg="#DB7093")

   name.place(x=40, y=65)


   name_textbox = Entry(frame,font=15)

   name_textbox.place(x=120, y=65)


   search_button = Button(frame, text='Search',
font=('Lucida Calligraphy', 12), bg='white', command=Search)

   search_button.place(x=160, y=100)
```

## Update



```
def click4():
    clear()

    name = Label(frame, text='Name',font=15,bg="#DB7093")
    name.place(x=40, y=10)

    number = Label(frame, text='Number',font=15,bg="#DB7093")
    number.place(x=40, y=55)

    name_textbox = Entry(frame,font=15)
    name_textbox.place(x=180, y=10)
```

code continued

```
   number_textbox = Entry(frame,font=15)
   number_textbox.place(x=180, y=55)


   newname = Label(frame, text='New
Name',font=15,bg="#DB7093")
   newname.place(x=40, y=170)


   newname_textbox = Entry(frame,font=15)
   newname_textbox.place(x=180, y=170)


   def Search():


       x = name_textbox.get()
       y = number_textbox.get()


       sqlquery = "SELECT * FROM newtable where Name='" + x
+ "'"


       cursor.execute(sqlquery)
       results = cursor.fetchall()


       try:
           for i in results:
               print(i)
               number_textbox.delete(0, END)
               number_textbox.insert(END, i[2])
               mydb.commit()
```

code continued

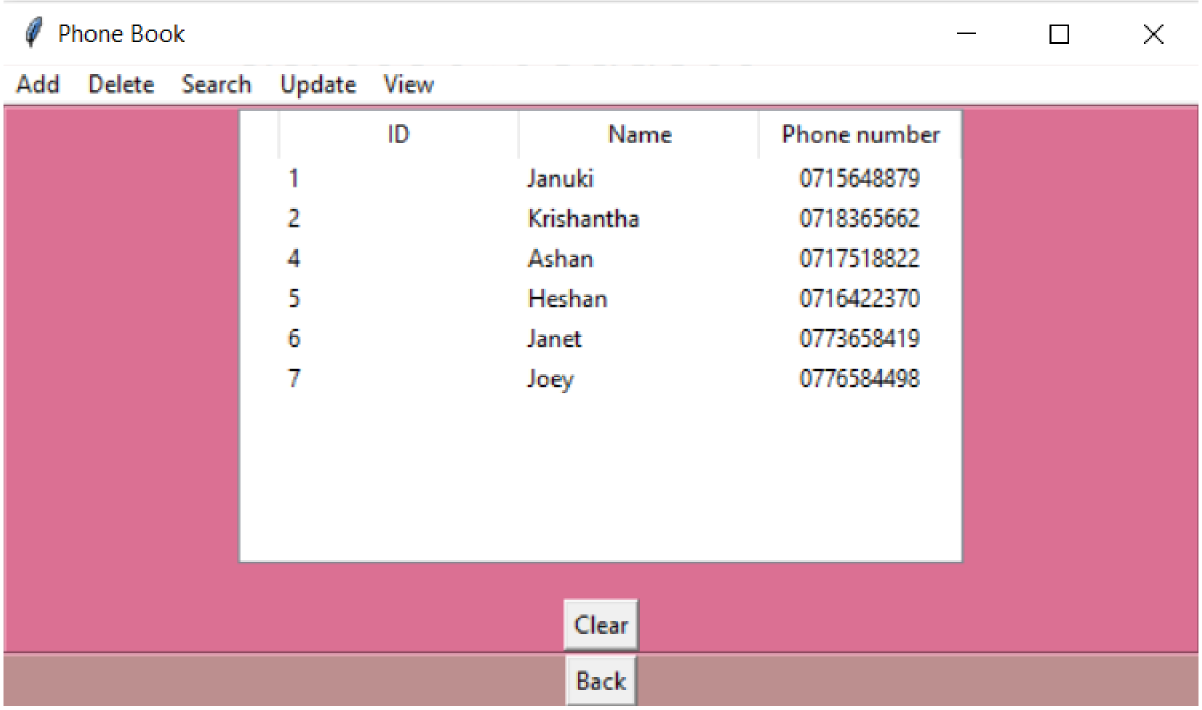
```
        except Exception as e:
            #print(e)
            mydb.rollback()
            messagebox.showinfo("Status", "Please insert a
value!")


        def Update():

            l = newname_textbox.get()
            x = name_textbox.get()

            try:
                for i in results:
                    update = "UPDATE newtable SET Name='" +
l + "' WHERE Name='" + x + "'"

                    cursor.execute(update)
                    mydb.commit()
                    messagebox.showinfo('Status', 'Updated
Successfully')

            except Exception as e:
                #print(e)
                mydb.rollback()

        edit_button = Button(frame,
text='Edit',font=('Lucida Calligraphy', 12), bg='white',
command=Update)
```

code continued

```
 edit_button.place(x=260, y=210)


   search_button = Button(frame,
text='Search',font=('Lucida Calligraphy', 12), bg='white',
command=Search)

   search_button.place(x=250, y=90)
```

## View

- **Recently Added order**

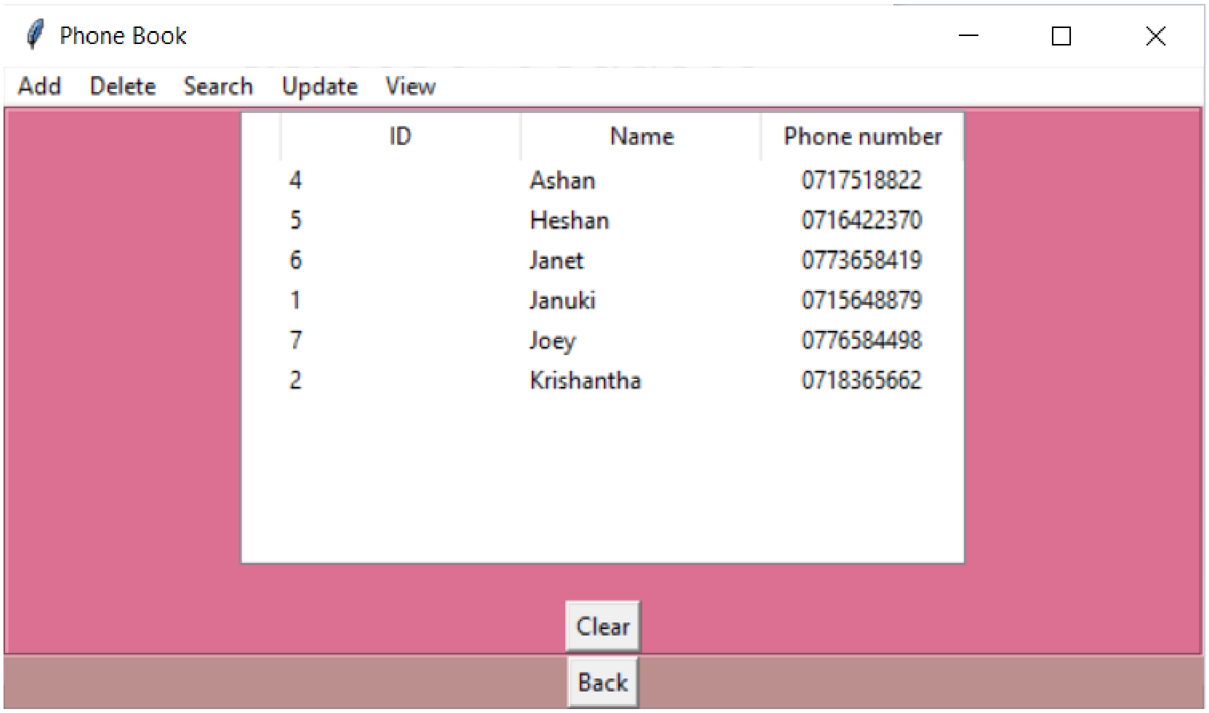


| ID | Name | Phone number |
|---|---|---|
| 1 | Januki | 0715648879 |
| 2 | Krishantha | 0718365662 |
| 4 | Ashan | 0717518822 |
| 5 | Heshan | 0716422370 |
| 6 | Janet | 0773658419 |
| 7 | Joey | 0776584498 |

code on next page

```
def viewdb2():
    clear()

    my_tree = ttk.Treeview(frame)

    my_tree['columns'] = ("Id", "Name", "Number")

    my_tree.column("#0", width=0)
    my_tree.column("Id", anchor=W, width=120)
    my_tree.column("Name", anchor=W, width=120)
    my_tree.column("Number", anchor=CENTER, width=120)

    my_tree.heading("Id", text="ID", anchor=CENTER)
    my_tree.heading("Name", text="Name", anchor=CENTER)
    my_tree.heading("Number", text="Phone number",
anchor=CENTER)

    my_tree.pack()

    for row in rows:
        # print(row)
        my_tree.insert(parent="", index="end", values=row)

    button = Button(frame, text="Clear",
command=clear).pack(side=BOTTOM)
```

- **Alphabetical order**



| ID | Name | Phone number |
|---|---|---|
| 4 | Ashan | 0717518822 |
| 5 | Heshan | 0716422370 |
| 6 | Janet | 0773658419 |
| 1 | Januki | 0715648879 |
| 7 | Joey | 0776584498 |
| 2 | Krishantha | 0718365662 |

```
def viewdb():
    clear()


    mycursor = mydb.cursor()

    sql = "SELECT * FROM newtable ORDER BY Name"

    mycursor.execute(sql)

    myresult = mycursor.fetchall()
```

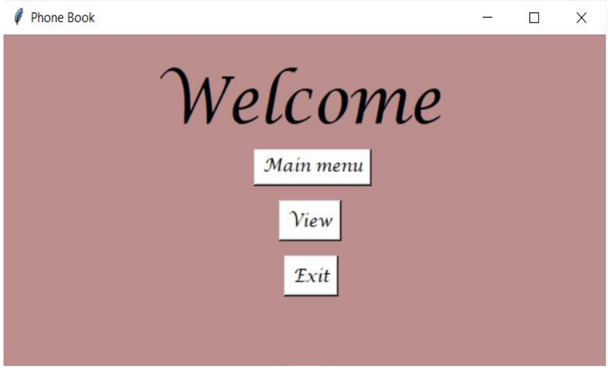
code continued

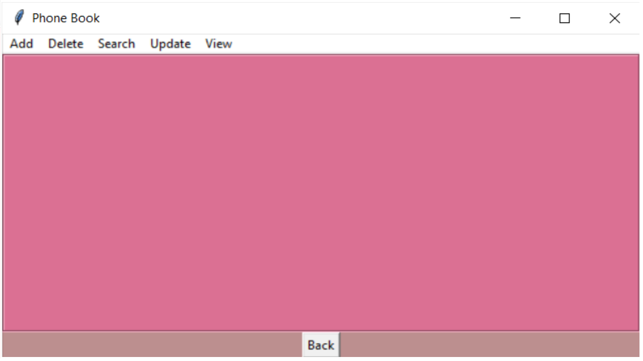
```
    my_tree = ttk.Treeview(frame)

    my_tree['columns'] = ("Id", "Name", "Number")

    my_tree.column("#0", width=0)
    my_tree.column("Id", anchor=W, width=120)
    my_tree.column("Name", anchor=W, width=120)
    my_tree.column("Number", anchor=CENTER, width=120)

    my_tree.heading("Id", text="ID", anchor=CENTER)
    my_tree.heading("Name", text="Name", anchor=CENTER)
    my_tree.heading("Number", text="Phone number",
anchor=CENTER)

    my_tree.pack()

    for row in myresult:
        # print(row)
        my_tree.insert(parent="", index="end", values=row)

    button = Button(frame, text="Clear",
command=clear).pack(side=BOTTOM)
```

## Back Button

```
def back():

   clearwindow()

   mydb = pymysql.connect(user="root", password="Ns3286463",
host="localhost", database="contactnumbers")

   cursor = mydb.cursor()


   sql = "SELECT * FROM newtable"

   cursor.execute(sql)

   rows = cursor.fetchall()


   button1 = Button(window, text="Main menu", font=('Lucida
Calligraphy', 12), bg='white', command=mainmenu).place(

       x=250, y=100)

   button2 = Button(window, text="View", font=('Lucida
Calligraphy', 12), bg='white', command=viewdb).place(x=275,


y=150)

   button3 = Button(window, text="Exit", font=('Lucida
Calligraphy', 12), bg='white', command=window.destroy).place(

       x=280, y=200)

   Label(window, text="Welcome", font="{Lucida Calligraphy}
45",bg="#BC8F8F").place(x=150, y=20)
```

# 7. The Final Result





```
from tkinter import *
import tkinter as tk
from tkinter import ttk
import pymysql
import mysql.connector
from tkinter import messagebox

mydb=pymysql.connect(user="root",password="Ns3286463",host="localhost",database="contactnumbers")
cursor=mydb.cursor()


sql="SELECT * FROM newtable"
cursor.execute(sql)
rows=cursor.fetchall()

window = Tk()
window.geometry("600x300")
window.title("Phone Book")
window.configure(bg='#BC8F8F')



def clearwindow():
    for widget in window.winfo_children():
        widget.destroy()

def back():
    clearwindow()
    mydb = pymysql.connect(user="root", password="Ns3286463",
host="localhost", database="contactnumbers")
    cursor = mydb.cursor()

    sql = "SELECT * FROM newtable"
    cursor.execute(sql)
    rows = cursor.fetchall()

    button1 = Button(window, text="Main menu", font=('Lucida
Calligraphy', 12), bg='white', command=mainmenu).place(
        x=250, y=100)
    button2 = Button(window, text="View", font=('Lucida
Calligraphy', 12), bg='white', command=viewdb).place(x=275,

y=150)
    button3 = Button(window, text="Exit", font=('Lucida
Calligraphy', 12), bg='white', command=window.destroy).place(
        x=280, y=200)
    Label(window, text="Welcome", font="{Lucida Calligraphy}
45",bg="#BC8F8F").place(x=150, y=20)



def viewdb():
    clearwindow()

    mycursor = mydb.cursor()

    sql = "SELECT * FROM newtable ORDER BY Name"

    mycursor.execute(sql)

    myresult = mycursor.fetchall()

    my_tree = ttk.Treeview(window)

    my_tree['columns'] = ("Id", "Name", "Number")

    my_tree.column("#0", width=0)
    my_tree.column("Id", anchor=W, width=120)
    my_tree.column("Name", anchor=W, width=120)
    my_tree.column("Number", anchor=CENTER, width=120)

    my_tree.heading("Id", text="ID", anchor=CENTER)
    my_tree.heading("Name", text="Name", anchor=CENTER)
    my_tree.heading("Number", text="Phone number", anchor=CENTER)
```

```python
    my_tree.pack()

    for row in myresult:
        #print(row)
        my_tree.insert(parent="", index="end", values=row)



button=Button(window,text="Back",command=back).pack(side=BOTTOM)



def mainmenu():

    clearwindow()

    frame = tk.LabelFrame(window, bg="#DB7093")
    frame.pack(expand=True, fill="both")

    mymenu = Menu(window)
    window.config(menu=mymenu)

    def clear():
        for widget in frame.winfo_children():
            widget.destroy()

    def viewdb():
        clear()


        mycursor = mydb.cursor()

        sql = "SELECT * FROM newtable ORDER BY Name"

        mycursor.execute(sql)

        myresult = mycursor.fetchall()

        my_tree = ttk.Treeview(frame)

        my_tree['columns'] = ("Id", "Name", "Number")

        my_tree.column("#0", width=0)
        my_tree.column("Id", anchor=W, width=120)
        my_tree.column("Name", anchor=W, width=120)
        my_tree.column("Number", anchor=CENTER, width=120)
        my_tree.heading("Id", text="ID", anchor=CENTER)
        my_tree.heading("Name", text="Name", anchor=CENTER)
        my_tree.heading("Number", text="Phone number",
anchor=CENTER)

        my_tree.pack()

        for row in myresult:

            my_tree.insert(parent="", index="end", values=row)

        button = Button(frame, text="Clear",
command=clear).pack(side=BOTTOM)

    def viewdb2():
        clear()

        my_tree = ttk.Treeview(frame)

        my_tree['columns'] = ("Id", "Name", "Number")

        my_tree.column("#0", width=0)
        my_tree.column("Id", anchor=W, width=120)
        my_tree.column("Name", anchor=W, width=120)
        my_tree.column("Number", anchor=CENTER, width=120)

        my_tree.heading("Id", text="ID", anchor=CENTER)
        my_tree.heading("Name", text="Name", anchor=CENTER)
        my_tree.heading("Number", text="Phone number",
anchor=CENTER)

        my_tree.pack()

        for row in rows:

            my_tree.insert(parent="", index="end", values=row)

        button = Button(frame, text="Clear",
command=clear).pack(side=BOTTOM)

    def click1():
        clear()

        def ConnectDB():
            Name = t1.get()
            Number = t2.get()
            try:
                sql = "INSERT INTO newtable(Name, Number) VALUES
(%s,%s)"
                val = (Name, Number)
                cursor.execute(sql, val)
                mydb.autocommit(True)
                messagebox.showinfo("Status", "Record inserted
successfully")

            except Exception as e:
                print(e)
                mydb.rollback()
                mydb.commit()
                messagebox.showinfo("Status", "Please insert a
value!")



        global t1
        global t2

        Label(frame, text="Please enter the Search name and
Phone Number",font="{Comic Sans MS}",bg="#DB7093").place(x=50,
y=10)
        Label(frame,
text='Name',font=15,bg="#DB7093").place(x=90, y=50)
        Label(frame,
text='Number',font=15,bg="#DB7093").place(x=80, y=90)

        t1 = Entry(frame,font=15)
        t1.place(x=200,y=50)

        t2 = Entry(frame,font=15)
        t2.place(x=200,y=90)


        insert = Button(frame, text='Insert',font=('Lucida
Calligraphy', 12),
bg='white',command=ConnectDB).place(x=225,y=150)
        button2 = Button(frame, text="Clear",font=('Lucida
Calligraphy', 12), command=clear).place(x=325,y=150)


    def click2():
        clear()
        def Search():
            x = name_textbox.get()
            y = number_textbox.get()
            mycursor = mydb.cursor()
            sqlquery = "SELECT * FROM newtable where Name='" + x
+ "'"
            mycursor.execute(sqlquery)
            results = mycursor.fetchall()

            try:
                for i in results:
                    print(i)
                    number_textbox.delete(0, END)
                    number_textbox.insert(END, i[2])
                    mydb.commit()

            except Exception as e:
                mydb.rollback()

                #mydb.close()


        Label(frame,text="Please enter Search Name",font="{Comic
Sans MS}",bg="#DB7093").place(x=50, y=10)

        name = Label(frame, text='Name',font=15,bg="#DB7093")
        name.place(x=40, y=55)

        number  = Label(frame,  text='Number',font=15,bg="#DB7093")
        number.place(x=35, y=185)

        name_textbox = Entry(frame,font=15)
        name_textbox.place(x=120,y=65)

        number_textbox = Entry(frame,font=15)
        number_textbox.place(x=120, y=185)

        search_button = Button(frame, text='Search',
font=('Lucida Calligraphy', 12), bg='white', command=Search)
        search_button.place(x=180,y=115)

    def click02():
        clear()

        def Search():
            x = name_textbox.get()
            y = number_textbox.get()
```

```
      mycursor = mydb.cursor()
      sqlquery = "SELECT * FROM newtable where Number='" +
y + "'"
      mycursor.execute(sqlquery)
      results = mycursor.fetchall()

      try:
          for i in results:
              print(i)
              name_textbox.delete(0, END)
              name_textbox.insert(END, i[1])
              mydb.commit()

      except Exception as e:
          mydb.rollback()

    Label(frame,text="Please enter Search
Number",font="{Comic Sans MS}",bg="#DB7093").place(x=50, y=10)

    name = Label(frame, text='Name',font=15,bg="#DB7093")
    name.place(x=40, y=185)

    number  = Label(frame,  text='Number',font=15,bg="#DB7093")
    number.place(x=35, y=55)

    name_textbox = Entry(frame,font=15)
    name_textbox.place(x=120, y=185)

    number_textbox = Entry(frame,font=15)
    number_textbox.place(x=120, y=65)

    search_button = Button(frame,
text='Search',font=('Lucida Calligraphy', 12), bg='white',
command=Search)
    search_button.place(x=180, y=115)

  def click002():
    clear()
    def Search():
      x = name_textbox.get()
      mycursor = mydb.cursor()
      sqlquery = "SELECT * FROM newtable WHERE name Like
'" + x + "%'"
      i = 0

      mycursor.execute(sqlquery)
      results = mycursor.fetchall()
```

```
            try:
                for p in results:
                    for j in range(len(p)):
                        print(p)
                        e = Entry(frame,
width=10,font=10,bg="#DB7093")
                        e.grid(row=i, column=j)
                        e.insert(END, p[j])
                        mydb.autocommit(True)
                    i = i + 1

                    name_textbox.destroy()
                    name.destroy()
                    search_button.destroy()


            except Exception as e:
                print(e)
                mydb.rollback()



        Label(frame,text="Enter the Search
Letter(s)",font=15,bg="#DB7093").place(x=50,y=10)

        name = Label(frame, text='Name',font=15,bg="#DB7093")
        name.place(x=40, y=65)

        name_textbox = Entry(frame,font=15)
        name_textbox.place(x=120, y=65)

        search_button = Button(frame, text='Search',
font=('Lucida Calligraphy', 12), bg='white', command=Search)
        search_button.place(x=160, y=100)



    def click3():
        clear()

        Label(frame, text="Please enter the Name", font="{Comic
Sans MS}",bg="#DB7093").place(x=100,y=10)


        def Delete():
            Name = t1.get()
            db = mysql.connector.connect(host="localhost",
user="root", password="Ns3286463", database="contactnumbers")
            mycursor = db.cursor()

                        try:


                val = (Name)
                mycursor.execute("DELETE FROM newtable WHERE
Name=%s", (val,))
                db.commit()
                messagebox.showinfo("Status", "Record deleted
successfully")

            except Exception as e:

                db.rollback()
                messagebox.showinfo("Status", "Please insert a
value!")



        global t1


        Label(frame,
text='Name',font=15,bg="#DB7093").place(x=40,y=65)

        t1 = Entry(frame,font=15)
        t1.place(x=120,y=65)

                delete = Button(frame, text='Delete',
font=('Lucida Calligraphy', 12), bg='white', command=Delete)
        delete.place(x=150,y=115)

        button2 = Button(frame, text="Clear",font=('Lucida
Calligraphy', 12), command=clear).place(x=250,y=115)


    def click4():
        clear()

        name = Label(frame, text='Name',font=15,bg="#DB7093")
        name.place(x=40, y=10)

        number  = Label(frame,  text='Number',font=15,bg="#DB7093")
        number.place(x=40, y=55)
        name_textbox = Entry(frame,font=15)
        name_textbox.place(x=180, y=10)

        number_textbox = Entry(frame,font=15)
        number_textbox.place(x=180, y=55)

        newname = Label(frame, text='New
Name',font=15,bg="#DB7093")
        newname.place(x=40, y=170)

        newname_textbox = Entry(frame,font=15)
        newname_textbox.place(x=180, y=170)

        def Search():

            x = name_textbox.get()
            y = number_textbox.get()

            sqlquery = "SELECT * FROM newtable where Name='" + x
+ "'"

            cursor.execute(sqlquery)
            results = cursor.fetchall()

            try:
                for i in results:
                    print(i)
                    number_textbox.delete(0, END)
                    number_textbox.insert(END, i[2])
                    mydb.commit()

            except Exception as e:

                mydb.rollback()
                messagebox.showinfo("Status", "Please insert a
value!")


            def Update():

                l = newname_textbox.get()
                x = name_textbox.get()

                try:
                    for i in results:
                        update = "UPDATE newtable SET Name='" +
l + "' WHERE Name='" + x + "'"

                        cursor.execute(update)
                        mydb.commit()
                        messagebox.showinfo('Status', 'Updated 
Successfully')

                except Exception as e:
                    mydb.rollback()


            edit_button = Button(frame, 
text='Edit',font=('Lucida Calligraphy', 12), bg='white', 
command=Update)
            edit_button.place(x=260, y=210)

        search_button = Button(frame, 
text='Search',font=('Lucida Calligraphy', 12), bg='white', 
command=Search)
        search_button.place(x=250, y=90)

    file_menu = Menu(mymenu)
    file_view =Menu(mymenu)
    mymenu.add_cascade(label="Add",font="12", command=click1)
    mymenu.add_cascade(label="Delete",font="12", command=click3)
    mymenu.add_cascade(label="Search",font="12", menu=file_menu)
    mymenu.add_cascade(label="Update",font="12",command=click4)
    mymenu.add_cascade(label="View",font="12",menu=file_view)

    file_menu.add_command(label="By Name", command=click2)
    file_menu.add_command(label="By Number", command=click02)
    file_view.add_command(label="Recently Added order", 
command=viewdb2)
    file_view.add_command(label="By Alphabetical 
order",command=viewdb)
    file_menu.add_command(label="By  Letter(s)",  command=click002)


    button = Button(window, text="Back", 
command=back).pack(side=BOTTOM)


button1 = Button(window,text="Main menu",font=('Lucida 
Calligraphy', 12), bg='white', 
command=mainmenu).place(x=250,y=100)
button2 = Button(window,text="View",font=('Lucida Calligraphy', 
12), bg='white', command=viewdb).place(x=275,y=150)
```

```
button3 = Button(window,text="Exit",font=('Lucida Calligraphy',
12), bg='white', command=window.destroy).place(x=280,y=200)
Label(window, text="Welcome", font="{Lucida Calligraphy}
45",bg="#BC8F8F").place(x=150,y=20)


window.mainloop()
```