COMPUTER SCIENCE INVESTIGATORY PROJECT

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ISHAN SINGH

Certificate of Excellence

This is to certify that this project is done by Mr. _____ Of class _____ during the academic year 2019-2020.

Date _____

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Submitted for ALL INDIA SENIOR SECONDARY EXAMINATION held in

_____
_____

Examiner

DATE_____

ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my teacher MRS. Reetu Randev, who has been the primary source of guidance in this project,as well as our principal MR. M.K. Garg who gave me the golden opportunity to do this wonderful project. Which also helped me in doing a lot of Research and I came to know about so many new things I am really thankful to them .

Secondly I would also like to thank my parents and friends a lot in finalizing this project and for their valuable ideas and suggestion that helped to complete this project.

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LIFESPARK BANK

Our project, LifesparkBank aims to provide a unique, easy to access , easy to operate, cost effective but sturdy methodology of banking system to its users.

LifesparkBank is developed using Python language with the help of tkinter library of python,
which with the help of its powerful GUI provides its users a very user friendly UI. Many special methods of tkinter library has been extensively utilised in our project.
To manage the large number of data and information, LifesparkBank takes the help of Mysql
database which provides it with seamless and smooth formation, manupilation and control of
large amount of records and data. This has been possible by using mysql connector from python which enables us to write and operate query on Python UI and execute it on Mysql
thus providing us with front end i.e, python where all commands are given and back end, i.e. Mysql , where are the execution of data takes place.

LifesparkBank provides its user with many functionality like:

- **Registration - This function takes credential from users as input and then registers them with lifesparkBank by opening their accounts with us.**
- **Login - It gives the users accessibility to their accounts by logging them into their accounts securely with is done with the sytem of name , account number, and user chosen password, thus making lifesparkBank more secure.**
- **deposit - It enables the users to deposit their money into their accounts**
- **withdraw - It enables the user to withdraw their money into their withdraw.**
- **transfer - it gives the users opportunity to directly take money from their accounts and deposit it into another persons account by giving their name and account number only**

The combination of all these functions , combined with the accessibility of LifesparkBank provides its users the best platform to operate and manage their assets. It is also an ideal platform for small retailers from rural areas,which are the target audiences.The functionality of LifesparkBank also helps us to move towards a more cashless economy thus providing more transperency in the whole system.

Source Code

```
#LifeSpark Bank
#Made by Ishan and Yash


from tkinter import *
from tkinter.ttk import Combobox

import mysql.connector

c = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\Background.gif'#image of background
d = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\favicon.ico'#image of bulb icon
e = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\lifespark.gif'#image of title :- LIFESPARK BANK
f = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\dashboard.gif'#image of dashboard
g = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\registration.gif'#image of registration
h = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\update.gif' #image of update
i = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\deposit.gif' #image of deposit
j = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\withdraw.gif' #image of withdraw
k = 'C:\\Users\\acer\\Desktop\\InvestigatoryProject\\PythonProject\\Bank Management
System_project\\images\\transfer.gif' #image of transfer




mydb = mysql.connector.connect(
  host="localhost",
  user="root",            #Enter your system's mysql username
  passwd="password",      #and password
  database="LifesparkBank"
)

mycursor = mydb.cursor()
'''--------------------USE THESE TO CREATE NEW DATABASE OR TABLE IF NOT EXIST----------------
-------'''
mycursor.execute('CREATE DATABASE IF NOT EXISTS LifeSparkBank')
mycursor.execute('''CREATE TABLE if not exists Accounts (Accno INT(5)ZEROFILL
AUTO_INCREMENT PRIMARY KEY,
                                    fname varchar(20),
                                    lname varchar(20),
                                    DOB DATE,
                                    Mobile_number varchar(11) ,
                                    email varchar(25),
                                    City varchar(20),
                                    PINCODE int,
                                    Balance_amount int,
                                    password varchar(40))''')
#mycursor.execute('DROP table accounts')
```

```
'''-------------------------------------WINDOWS-----------------------------------'''
def opwin1():
    global background_image1
    global background_image17


    HEIGHT = 600
    WIDTH = 650
    top = Toplevel()
    top.title('BANK MANAGEMENT')
    top.iconbitmap(d)

    canvas1 = Canvas(top, height = HEIGHT , width = WIDTH)
    canvas1.pack()

    background_image1 = PhotoImage(file=c)
    background_label1 = Label (top, image = background_image1)
    background_label1.place(relwidth =1 ,relheight =1)

    background_image17 = PhotoImage(file= f )
    background_label17 = Label (top, image = background_image17)
    background_label17.place(relwidth = 1 ,relheight = 0.15)




    frame3 = Frame (top, bg = "#80c1ff",bd =5)
    frame3.place(relx =0.1 , rely =0.18, relwidth = 0.35, relheight = 0.3 )

    frame3 = Frame (top, bg = "#80c1ff",bd =5)
    frame3.place(relx =0.1 , rely =0.58, relwidth = 0.35, relheight = 0.3 )


    frame4 = Frame (top, bg = "#80c1ff",bd =5)
    frame4.place(relx =0.57 , rely =0.18, relwidth = 0.35, relheight = 0.3 )

    frame4 = Frame (top, bg = "#80c1ff",bd =5)
    frame4.place(relx =0.57 , rely =0.58, relwidth = 0.35, relheight = 0.3 )

#---------------------------------withdraw function-----------------------------------------------

    def opwin2 ():


        global background_image2
        global background_image21
        HEIGHT = 600
        WIDTH = 650
        top1 = Toplevel()
        top1.title('BANK MANAGEMENT')
        top1.iconbitmap(d)
        canvas2 = Canvas(top1, height = HEIGHT , width = WIDTH)
        canvas2.pack()
```

```
    background_image2 = PhotoImage(file=c)
    background_label2 = Label (top1, image = background_image2)
    background_label2.place(relwidth =1 ,relheight =1)

    background_image21 = PhotoImage(file=j)
    background_label21 = Label (top1, image = background_image21)
    background_label21.place(relwidth =1 ,relheight =0.15)

    l4 = Label(top1, text = "Amount:", font = ' bold 36')
    l4.place(relx= 0.07, rely =0.47)

    frame5 = Frame (top1, bg = "#80c1ff",bd =5)
    frame5.place(relx =0.37 , rely =0.43, relwidth = 0.6, relheight = 0.2 )

    e3 = Entry(frame5 , font = 'bold 40')
    e3.place (relwidth = 0.6 , relheight = 1,anchor = 'nw')#withdraw

    def withdraw():
        withdraw_amount=e3.get()
        val=(withdraw_amount,fname,lname,passwd)
        sql='UPDATE accounts SET balance_amount=balance_amount-(%s)WHERE fname=%s
AND lname=%s AND password=%s'

        mycursor.execute(sql,val)
        mydb.commit()
        opwin3()



    def opwin3 () :
      global background_image3
      HEIGHT = 600
      WIDTH = 650
      top2 = Toplevel()
      top2.title('BANK MANAGEMENT')
      top2.iconbitmap(d)
      canvas3 = Canvas(top2, height = HEIGHT , width = WIDTH)
      canvas3.pack()

      background_image3 = PhotoImage(file= c)
      background_label3 = Label (top2, image = background_image3)
      background_label3.place(relwidth =1 ,relheight =1)

      l5 = Label(top2, text = "Money had been withdrawn.", font = ' bold 36')
      l5.place(relx= 0.07, rely =0.42)


      l6 = Label(top2, text = "          Visit Again !!", font = ' bold 36')
      l6.place(relx= 0.07, rely =0.51)

    b4 = Button(top1,text = "ENTER",font = ' bold 30',bg = 'white', command = withdraw)
    b4.place(relx =0.74 , rely =0.44, relwidth = 0.22, relheight = 0.18 )
  b2 = Button(top,text = "WITHDRAW",font = ' bold 27',bg = 'white', command = opwin2)
```

```
    b2.place(relx =0.11,rely = 0.19,relwidth = 0.33, relheight = 0.28)

#--------------------------------------Deposit-------------------------------------------
    def opwin6 ():

        global background_image2
        global background_image20
        HEIGHT = 600
        WIDTH = 650
        top6 = Toplevel()
        top6.title('BANK MANAGEMENT')
        top6.iconbitmap(d)
        canvas6 = Canvas(top6, height = HEIGHT , width = WIDTH)
        canvas6.pack()

        background_image2 = PhotoImage(file= c)
        background_label2 = Label (top6, image = background_image2)
        background_label2.place(relwidth =1 ,relheight =1)

        background_image20 = PhotoImage(file= i)
        background_label20 = Label (top6, image = background_image20)
        background_label20.place(relwidth =1 ,relheight =0.15)

        l6 = Label(top6, text = "Amount:", font = ' bold 36')
        l6.place(relx= 0.07, rely =0.47)

        frame6 = Frame (top6, bg = "#80c1ff",bd =5)
        frame6.place(relx =0.37 , rely =0.43, relwidth = 0.6, relheight = 0.2 )

        e6 = Entry(frame6 , font = 'bold 40')
        e6.place (relwidth = 0.6 , relheight = 1,anchor = 'nw')#deposit

        def deposit():
                add_amount=e6.get()

                val=(add_amount,fname,lname,passwd)
                sql='UPDATE accounts SET balance_amount=balance_amount+(%s)WHERE fname=%s
AND lname=%s AND password=%s'

                mycursor.execute(sql,val)
                mydb.commit()
                opwin7()




        def opwin7 () :
            global background_image3
            HEIGHT = 600
            WIDTH = 650
            top7 = Toplevel()
            top7.title('BANK MANAGEMENT')
            top7.iconbitmap(d)
```

```
        canvas7 = Canvas(top7, height = HEIGHT , width = WIDTH)
        canvas7.pack()

        background_image3 = PhotoImage(file= c)
        background_label3 = Label (top7, image = background_image3)
        background_label3.place(relwidth =1 ,relheight =1)

        l7 = Label(top7, text = "Money had been Deposited.", font = ' bold 36')
        l7.place(relx= 0.07, rely =0.42)


        l8= Label(top7, text = "            Visit Again !!", font = ' bold 36')
        l8.place(relx= 0.07, rely =0.51)

    b11 = Button(top6,text = "ENTER",font = ' bold 30',bg = 'white', command = deposit)
    b11.place(relx =0.74 , rely =0.44, relwidth = 0.22, relheight = 0.18 )

  b10 = Button(top,text = "DEPOSIT",font = ' bold 27',bg = 'white', command = opwin6)
  b10.place(relx =0.11,rely = 0.59,relwidth = 0.33, relheight = 0.28)

#-----------------------------------Transfer

  def opwin8 ():

    global background_image2
    global background_image22
    HEIGHT = 600
    WIDTH = 650
    top1 = Toplevel()
    top1.title('BANK MANAGEMENT')
    top1.iconbitmap(d)
    canvas2 = Canvas(top1, height = HEIGHT , width = WIDTH)
    canvas2.pack()

    background_image2 = PhotoImage(file= c)
    background_label2 = Label (top1, image = background_image2)
    background_label2.place(relwidth =1 ,relheight =1)

    background_image22 = PhotoImage(file= k)
    background_label22 = Label (top1, image = background_image22)
    background_label22.place(relwidth =1 ,relheight =0.15)

    l4 = Label(top1, text = "Amount:", font = ' bold 36')
    l4.place(relx= 0.07, rely =0.53)

    frame5 = Frame (top1, bg = "#80c1ff",bd =5)
    frame5.place(relx =0.37 , rely =0.49, relwidth = 0.6, relheight = 0.2 )

    e345 = Entry(frame5 , font = 'bold 40')
    e345.place (relwidth = 0.6 , relheight = 1,anchor = 'nw')#transfer amount

    l12 = Label(top1, text = "Account no. of reciever :", font = ' bold 20')
    l12.place(relx= 0.07, rely =0.25)
```

```
        frame12 = Frame (top1, bg = "#80c1ff",bd =5)
        frame12.place(relx =0.07 , rely =0.32, relwidth = 0.6, relheight = 0.08 )

        e126 = Entry(frame12 , font = 'bold 20')
        e126.place (relwidth = 1 , relheight = 1,anchor = 'nw')#account no. of reciever

        frame112 = Frame (top1, bg = "#80c1ff",bd =5)
        frame112.place(relx =0.42 , rely =0.40, relwidth = 0.6, relheight = 0.08 )

        l12 = Label(top1, text = "Name of reciever :", font = ' bold 20')
        l12.place(relx= 0.07, rely =0.40)

        ename= Entry(frame112, font = 'bold 20')
        ename.place(relwidth=0.6 , relheight=1,anchor = 'nw')


        def transfer():

                fname=ename.get()
                accno=e126.get()
                amount=e345.get()

                val=(amount,accno,fname)
                sql= 'UPDATE accounts SET balance_amount=balance_amount+(%s) WHERE
accno=%s AND fname=%s'
                mycursor.execute(sql,val)

                ifname=e123.get()
                ilname=e223.get()
                iaccno=e1.get()

                val1=(amount,iaccno,ifname)
                sql1= 'UPDATE accounts SET balance_amount=balance_amount-(%s) WHERE
accno=%s AND fname=%s'

                mycursor.execute(sql1,val1)
                mydb.commit()
                opwin5()



        def opwin5 () :
            global background_image3
            HEIGHT = 600
            WIDTH = 650
            top2 = Toplevel()
            top2.title('BANK MANAGEMENT')
            top2.iconbitmap(d)
            canvas3 = Canvas(top2, height = HEIGHT , width = WIDTH)
            canvas3.pack()

            background_image3 = PhotoImage(file= c)
            background_label3 = Label (top2, image = background_image3)
            background_label3.place(relwidth =1 ,relheight =1)
```

```
        l5 = Label(top2, text = "Money had been Transferred.", font = ' bold 36')
        l5.place(relx= 0.04, rely =0.42)


        l6 = Label(top2, text = "            Visit Again !!", font = ' bold 36')
        l6.place(relx= 0.07, rely =0.51)



    b4 = Button(top1,text = "ENTER",font = ' bold 30',bg = 'white', command = transfer)
    b4.place(relx =0.74 , rely =0.50, relwidth = 0.22, relheight = 0.18 )




  b8 = Button(top,text = "TRANSFER",font = ' bold 27',bg = 'white', command = opwin8 )
  b8.place(relx =0.58,rely = 0.19,relwidth = 0.33, relheight = 0.28)



'-----------------------------------Login-----------------------------------------------'''

HEIGHT = 600
WIDTH =  650

window = Tk()
window.title(" BANK MANAGEMENT")
window.iconbitmap(d)
canvas = Canvas(window, height = HEIGHT , width = WIDTH)
canvas.pack()

background_image = PhotoImage(file= c)

background_label = Label (window, image = background_image)
background_label.place(relwidth =1 ,relheight =1)

background_image16 = PhotoImage(file= e )
background_label16 = Label (window, image = background_image16)
background_label16.place(relwidth = 1 ,relheight = 0.185)




l123 = Label(window, text = "First Name*", font = {'Helvetica',10})
l123.place(relx= 0.1, rely =0.27)

l223 = Label(window, text = "Last Name*",font = {'Helvetica',10})
l223.place(relx= 0.5, rely =0.27)
```

```
frame123 = Frame (window, bg = "#80c1ff",bd =5)
frame123.place(relx =0.1 , rely =0.32, relwidth = 0.35, relheight = 0.06 )

frame223 = Frame (window, bg = "#80c1ff",bd =5)
frame223.place(relx =0.5 , rely =0.32, relwidth = 0.35, relheight = 0.06 )

e123 = Entry(frame123 , font =40)
e123.place (relwidth = 1 , relheight = 1)#first name login

e223 = Entry(frame223 , font =40)
e223.place (relwidth = 1 , relheight = 1)#last name login



l1 = Label(window, text = "Account No.*", font = {'Helvetica',10})
l1.place(relx= 0.1, rely =0.4)

l2 = Label(window, text = "Pasword*",font = {'Helvetica',10})
l2.place(relx= 0.1, rely =0.53)

l3 = Label(window, text = "Don't have an account ? Try signing up.")
l3.place(relx= 0.1, rely =0.64)

frame1 = Frame (window, bg = "#80c1ff",bd =5)
frame1.place(relx =0.1 , rely =0.45, relwidth = 0.7, relheight = 0.06 )

frame2 = Frame (window, bg = "#80c1ff",bd =5)
frame2.place(relx =0.1 , rely =0.58, relwidth = 0.7, relheight = 0.06 )

e1 = Entry(frame1 , font =40)
e1.place (relwidth = 1 , relheight = 1)#account no. login

e2 = Entry(frame2 , font =40, show = '*')
e2.place (relwidth = 1 , relheight = 1)#password login



def login():

    global fname,lname, Accno, passwd
    fname = e123.get()
    lname = e223.get()
    Accno = e1.get()
    passwd= e2.get()

    mycursor = mydb.cursor(buffered=True)

    #Exception handling, i,e. calling out for wrong login credentials

    mycursor.execute("SELECT Accno,fname,password,lname FROM accounts")
    table_data = mycursor.fetchall()

    for i in range (0,len(table_data)):
```

```
        if table_data[i][1]==fname and table_data[i][2]==passwd and table_data[i][3]==lname:
            val=(fname,lname,passwd)
            sql="SELECT * FROM accounts WHERE fname = %s AND lname= %s AND
password=%s"


            mycursor.execute(sql,val)
            mydb.commit()
            opwin1()
            break


        else:
            print("The information entered is incorrect,please try again")
            continue
            login()


b1 = Button(window,text = "Login",font = 40,bg = '#80c1ff',command = login)
b1.place(relx =0.77,rely = 0.73)



'''----------------------------------------Registration Function----------------------------------------'''

def opwin4 ():
        global background_image4
        global background_image18
        global  combo
        HEIGHT = 600
        WIDTH = 650
        top3 = Toplevel()
        top3.title('BANK MANAGEMENT')
        top3.iconbitmap(d)



        canvas4 = Canvas(top3, height = HEIGHT , width = WIDTH)
        canvas4.pack()









        background_image4 = PhotoImage(file= c)
        background_label4 = Label (top3, image = background_image4)
        background_label4.place(relwidth =1 ,relheight =1)

        background_image18 = PhotoImage(file= g  )
```

```
        background_label18 = Label (top3, image = background_image18)
        background_label18.place(relwidth = 1 ,relheight = 0.15)

        frame6 = Frame (top3, bg = "#80c1ff",bd =5)
        frame6.place(relx =0.1 , rely =0.28, relwidth = 0.43, relheight = 0.06 )

        l5 = Label(top3, text = "First Name", font = '40')
        l5.place(relx = 0.11, rely = 0.29,relwidth= 0.15, relheight = 0.04)

        e34 = Entry(top3 , font = ' 40')
        e34.place (relx= 0.27 , rely= 0.29  ,relwidth = 0.25 , relheight = 0.04 ) # first name register

        frame61 = Frame (top3, bg = "#80c1ff",bd =5)
        frame61.place(relx =0.5 , rely =0.28, relwidth = 0.43, relheight = 0.06 )

        l51 = Label(top3, text = "Last Name", font = '40')
        l51.place(relx = 0.51, rely = 0.29,relwidth= 0.15, relheight = 0.04)

        e31 = Entry(top3 , font = ' 40')
        e31.place (relx= 0.67 , rely= 0.29  ,relwidth = 0.25 , relheight = 0.04 ) #last name register


        frame7 = Frame (top3, bg = "#80c1ff",bd =5)
        frame7.place(relx =0.1 , rely =0.35, relwidth = 0.4, relheight = 0.06 )

        l6 = Label(frame7, text = "Gender", font = '40')
        l6.place(relwidth= 0.23, relheight = 1)

        v12 = [ 'Male','Female','Rather not say' ]
        combo = Combobox ( top3 ,values = v12 ,   font ={'Helvetica',10} )
        combo.place (relx= 0.21 , rely= 0.36  ,relwidth = 0.28 , relheight = 0.04 ) # gender register



        frame8 = Frame (top3, bg = "#80c1ff",bd =5)
        frame8.place(relx =0.1 , rely =0.42, relwidth = 0.59, relheight = 0.06 )

        l7 = Label(top3, text = "Date of birth", font = '40')
        l7.place(relx= 0.11 , rely= 0.43  ,relwidth = 0.14 , relheight = 0.04 )




        d1 = Entry( top3 ,   font ={'Helvetica',10} )
        d1.place (relx= 0.31 , rely= 0.43  ,relwidth = 0.07 , relheight = 0.04 ) #combobox day register

        l7 = Label(top3, text = "Date", font = '40')
        l7.place(relx= 0.26 , rely= 0.43  ,relwidth = 0.05 , relheight = 0.04)


        d2 = Entry( top3 , font ={'Helvetica',10} )
        d2.place (relx= 0.45 , rely= 0.43  ,relwidth = 0.07 , relheight = 0.04 ) #combobox month
register
```

```
        l7 = Label(top3, text = "Month", font = '40')
        l7.place(relx= 0.38 , rely= 0.43  ,relwidth = 0.07 , relheight = 0.04)




        d3 = Entry( top3 ,font ={'Helvetica',10} )
        d3.place (relx= 0.58 , rely= 0.43  ,relwidth = 0.1 , relheight = 0.04 ) #combobox year register

        l7 = Label(top3, text = "Year", font = '40')
        l7.place(relx= 0.52 , rely= 0.43  ,relwidth = 0.06 , relheight = 0.04)


        frame9 = Frame (top3, bg = "#80c1ff",bd =5)
        frame9.place(relx =0.1 , rely =0.49, relwidth = 0.52, relheight = 0.06 )

        l7 = Label( top3, text = "Mobile No.", font = '40')
        l7.place(relx = 0.11  , rely= 0.50  ,relwidth= 0.14, relheight = 0.04)


        e6 = Entry(top3 , font = ' 40')
        e6.place (relx= 0.42 , rely= 0.50  ,relwidth = 0.19 , relheight = 0.04 ) # mobile no. register

        v = ['(AFG)"+93','(ALB)"+355','(DZA)"+213','(ASM)' '+1','(AND)' '+376', '(AGO)"+244','(ANG)'
'+1','(ATG)' '+1', '(ARG)"+54','(ARM)' '+374',
             '(ABW)' '+297','(AUS)' '+61', '(AUT)"+43', '(AZE)"+994','(BHS)' '+1','(BHR)' '+973',
'(BGD)"+880',
              '(BRB)"+1','(BLR)' '+375','(BEL)' '+32','(BLZ)' '+501','(BEN)' '+229', '(BMU)"+1','(BTN)'
'+975',
             '(BOL)' '+591','(BIH)' '+387','(BWA)' '+267','(BRA)' '+55','(BRN)' '+673',
'(BGR)"+359','(BFA)' '+226',
             '(BDI)' '+257', '(KHM)"+855','(CMR)' '+237','(CAN )"+1','(CPV)' '+238','(CYM )"+1','(CAF)'
'+236',
             '(TCD)"+235','(CHL)"+56','(CHN)' '+86','(CXR)' '+61', '(CCK)"+61', '(COL)"+57','(COM)'
'+269',
             '(COD)' '+242','(COK)'  '+682','(CRI)' '+506','(CIV)' '+225','(HRV)' '+385','(CUB)"+53',
             '(CYP)' '+357','(CZE)' '+420','(DNK)"+45' ,'(DJI)"+253' ,'(DMA)"+1'
,'(DOM)"+1','(ECU)"+593','(EGY)"+20',
             '(SLV)' '+503', '(GNQ)' '+240', '(ERI)' '+291','(EST)' '+372',  '(ETH)"+251', '(FLK)' '+500',
             '(FRO)' '+298', '(FJI)' '+679', '(FIN)' '+358','(FRA)"+33','(GUF)'  '+594', '(PYF)' '+689',
             '(GAB)"+241', '(GMB)' '+220', '(GEO )' '+995', '(DEU)' '+49','(GHA)'  '+233','(GIB)'  '+350',
             '(GRC)' '+30', '(GRL)' '299', '(GRD)"+1', '(GLP)' '+590','(GUM)'  '+1','(GTM )' '+502','(GIN)'
'+224', '(GNB)' '+245',
             '(GUY)' '+592', '(HTI)' '+509', '(VAT)' '+379', '(HND)' '+504', '(HKG)' '+852','(HUN)' '+36',
'(ISL)' '+354',  '(IND)"+91',
             '(IDN)' '+62', '(IRN)' '+98','(IRQ)'  '+964', '(IRL)' '+353','(ISR)'  '+972', '(ITA)' '+39',  '(JAM)'
'+876' ,'(JPN)' '+81','(JOR)' '+962',
              '(KAZ)"+7','(KEN)'  '+254', '(KIR)' '+686','(PRK)'  '+850', '(KOR)' '+82','(KWT)'  '+965',
'(KGZ)' '+996','(LAO)'  '+856',
              '(LVA)"+371', '(LBN)' '+961', '(LSO)"+266','(LBR)'  '+231', '(LBY)' '+218','(LIE)'  '+423',
'(LTU)' '+370','(LUX)'  '+352',
             '(MAC)' '+853','(MKD)'  '+389', '(MDG)' '+261','(MWI)'  '+265','(MYS)' '+60', '(MDV)' '+960',
'(MLI)' '+223', '(MLT)' '+356',
```

```
            '(MHL)' '+692',  '(MTQ)"+596', '(MRT)' '+222','(MUS)'  '+230', '(MYT)' '+262', '(MEX)'
'+52','(FSM)' '+691', '(MDA)' '+373',
            '(MCO)' '+377', '(MNG)' '+976', '(MNE)' '+382', '(MSR)' '+1', '(MAR)' '+212', '(MOZ)' '+258',
'(MMR)' '+95','(NAM)' '+264',
             '(NRU)' '+674','(NPL)' '+977','(NLD)'  '+31','(ANT)'  '+599', '(NCL)' '+687', '(NZL)' '+64',
'(NIC)' '+505','(NER)'  '+227',
            '(NGA)' '+234',  '(NIU)' '+683', '(NFK)' '+672', '(MNP)' '+1' ,'(NOR)"+47', '(OMN)' '+968',
'(PAK)' '+92','(PLW)'  '+680',
             '(PSE)"+970', '(PAN)' '+507', '(PNG)' '+675', '(PRY)' '+595', '(PER)' '+51','(PHL)'  '+63',
'(PCN)' '+870','(POL)' '+48',
             '(PRT)"+351', '(PRI)' '+1', '(QAT)' '+974','(REU)'  '+262', '(ROU)' '+40', '(RUS)' '+7','(RWA)'
'+250','(SHN)'  '+290','(KNA)'  '+1',
            '(LCA)' '+1','(SPM)'  '+508', '(VCT)"+1', '(WSM)' '+685', '(SMR)' '+378', '(STP)' '+239',
'(SAU)' '+966', '(SEN)' '+221',
            '(SRB)' '+381','(SYC)'  '+248', '(SLE)' '+232', '(SGP)' '+65','(SVK)'  '+421','(SVN)' '+386',
'(SLB)' '+677', '(SOM)' '+252',
             '(ZAF)' '+27', '(ESP)' '+34','(LKA)'  '+94', '(SDN)' '+249', '(SUR)' '+597','(SJM0' '+47','(SWZ)'
'+268','(SWE)'  '+46','(CHE)' '+41',
            '(SYR0' '+963', '(TWN)' '+886','(TJK)'  '+992','(TZA)'  '+255', '(THA)' '+66', '(TGO)'
'+228','(TKL)'  '+690',
           '(TON)'  '+676', '(TTO)' '+1', '(TUN)'  '+216','(TUR)' '+90','(TKM)'  '+993','(TCA)'  '+1', '(TUV)'
'+688','(UGA)'  '+256','(UKR)'  '+380',
             '(ARE)"+971', '(GBR)' '+44', '(USA)' '+1', '(URY)' '+598','(UZB)' '+998','(VUT)'
'+678','(VEN)'  '+58', '(VNM)' '+84', '(VIR)' '+1',
             '(WLF)'  '+681','(YEM)'  '+967', '(ZMB)' '+260', '(ZWE)' '+263'  ]


        combo = Combobox ( top3 ,values = v ,   font ={'Helvetica',10},  )
        combo.place (relx= 0.26 , rely= 0.50 ,relwidth = 0.16 , relheight = 0.04 ) # combobox mobile
no. country code register




        frame7 = Frame (top3, bg = "#80c1ff",bd =5)
        frame7.place(relx =0.1 , rely =0.56, relwidth = 0.4, relheight = 0.06 )




        l6 = Label(frame7, text = "Email", font = '40')
        l6.place(relwidth= 0.23, relheight = 1)


        e48 = Entry(top3 , font = ' 40')
        e48.place (relx= 0.21 , rely= 0.57  ,relwidth = 0.28 , relheight = 0.04 )#email register



        frame6 = Frame (top3, bg = "#80c1ff",bd =5)
        frame6.place(relx =0.1 , rely =0.63, relwidth = 0.36, relheight = 0.06 )

        l5 = Label(top3, text = "City", font = '40')
        l5.place(relx = 0.11     ,rely = 0.64     ,relwidth= 0.07, relheight = 0.04)
```

```
e38 = Entry(top3 , font = ' 40')
e38.place (relx= 0.19 , rely= 0.64  ,relwidth = 0.26 , relheight = 0.04 )#city register


frame7 = Frame (top3, bg = "#80c1ff",bd =5)
frame7.place(relx =0.1 , rely =0.7, relwidth = 0.29, relheight = 0.06 )




l6 = Label(top3, text = "Pincode", font = '40')
l6.place(relx = 0.11  ,rely = 0.71   ,relwidth= 0.1, relheight = 0.04)


e47 = Entry(top3 , font = ' 40')
e47.place (relx= 0.22 , rely= 0.71  ,relwidth = 0.16 , relheight = 0.04 )#pincode register

frame10 = Frame (top3, bg = "#80c1ff",bd =5)
frame10.place(relx =0.1 , rely =0.76, relwidth = 0.29, relheight = 0.06 )




l10 = Label(top3, text = "Balance ", font = '40')
l10.place(relx = 0.11  ,rely = 0.76   ,relwidth= 0.1, relheight = 0.04)


bl1 = Entry(top3 , font = ' 40')
bl1.place (relx= 0.22 , rely= 0.76  ,relwidth = 0.16 , relheight = 0.04 )#Balance


frame7 = Frame (top3, bg = "#80c1ff",bd =5)
frame7.place(relx =0.1 , rely =0.84, relwidth = 0.4, relheight = 0.06 )

l6 = Label(frame7, text = "Password", font = '40')
l6.place(relwidth= 0.29, relheight = 1)


e43 = Entry(top3 , font = ' 40')
e43.place (relx= 0.23, rely= 0.85  ,relwidth = 0.26 , relheight = 0.04 )#password register


def opwin5 ():

    global background_image5

    HEIGHT = 600
    WIDTH = 650
    top4 = Toplevel()
    top4.title('BANK MANAGEMENT')
    top4.iconbitmap(d)
    canvas5 = Canvas(top4, height = HEIGHT , width = WIDTH)
```

```
        canvas5.pack()

        background_image5 = PhotoImage(file= c)
        background_label5 = Label (top4, image = background_image5)
        background_label5.place(relwidth =1 ,relheight =1)

        l5 = Label(top4, text = "Your account is created !!", font = ' bold 36')
        l5.place(relx= 0.07, rely =0.42)

        l11 = Label(top4, text='Your Account number is',font = ' bold 24 ')
        l11.place(relx=0.07, rely = 0.50)

        l12 = Label(top4, text = table_data[0], font = 'bold 24')
        l12.place(relx = 0.3,rely= 0.50)

        l6 = Label(top4, text ="    Try logging in. ", font = ' bold 36')
        l6.place(relx= 0.07, rely =0.54)



    def new_account():

            fname  = e34.get()
            lname  = e31.get()
            DOB    = int(str(d3.get())+str(d2.get())+str(d1.get()))
            passwd = e43.get()
            email  = e48.get()
            city   = e38.get()
            pincode= e47.get()
            mobile_number = e6.get()
            balance_amount =bl1.get()

            sql ='''INSERT INTO Accounts(fname,
                                lname,
                                DOB,
                                mobile_number,
                                email,
                                city,
                                pincode,
                                balance_amount,
                                password) values (%s,%s,%s,%s,%s,%s,%s,%s,%s)'''



            values = (fname,lname,DOB
,mobile_number,email,city,pincode,balance_amount,passwd)


            mycursor.execute(sql,values)
            mydb.commit()

            opwin5()
```

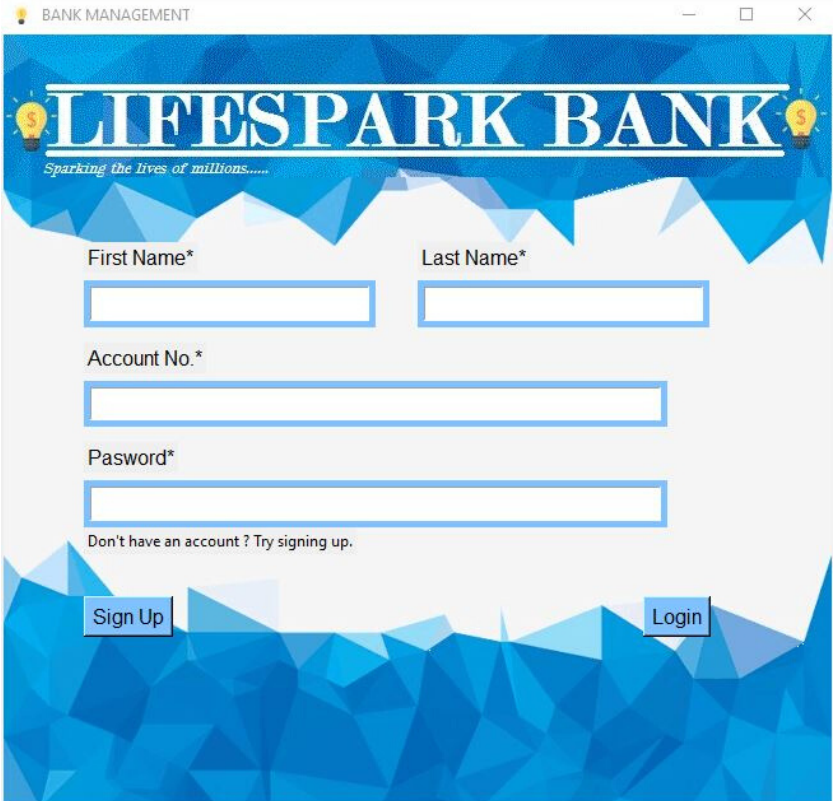
```
        b5 = Button(top3,text = "Register",font = 40,bg = '#80c1ff',command = new_account )
        b5.place(relx =0.1,rely = 0.93 )
```

```
b4 = Button (window,text = "Sign Up",font = 40,bg = '#80c1ff', command = opwin4)
b4.place(relx =0.1,rely = 0.73)
```

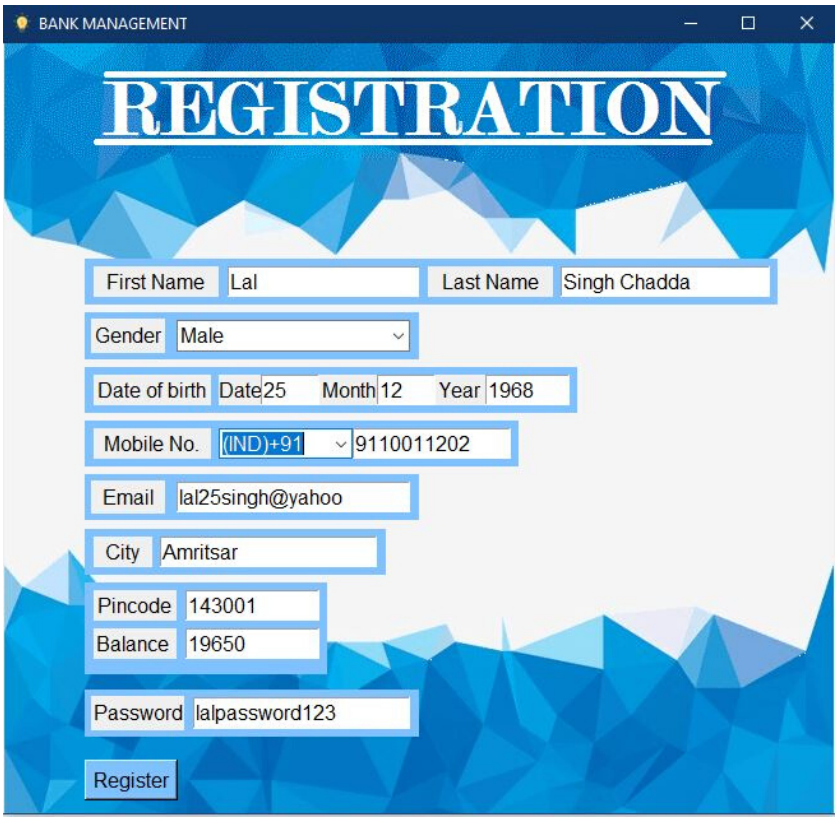
```
window.mainloop()
```

OUTPUTS

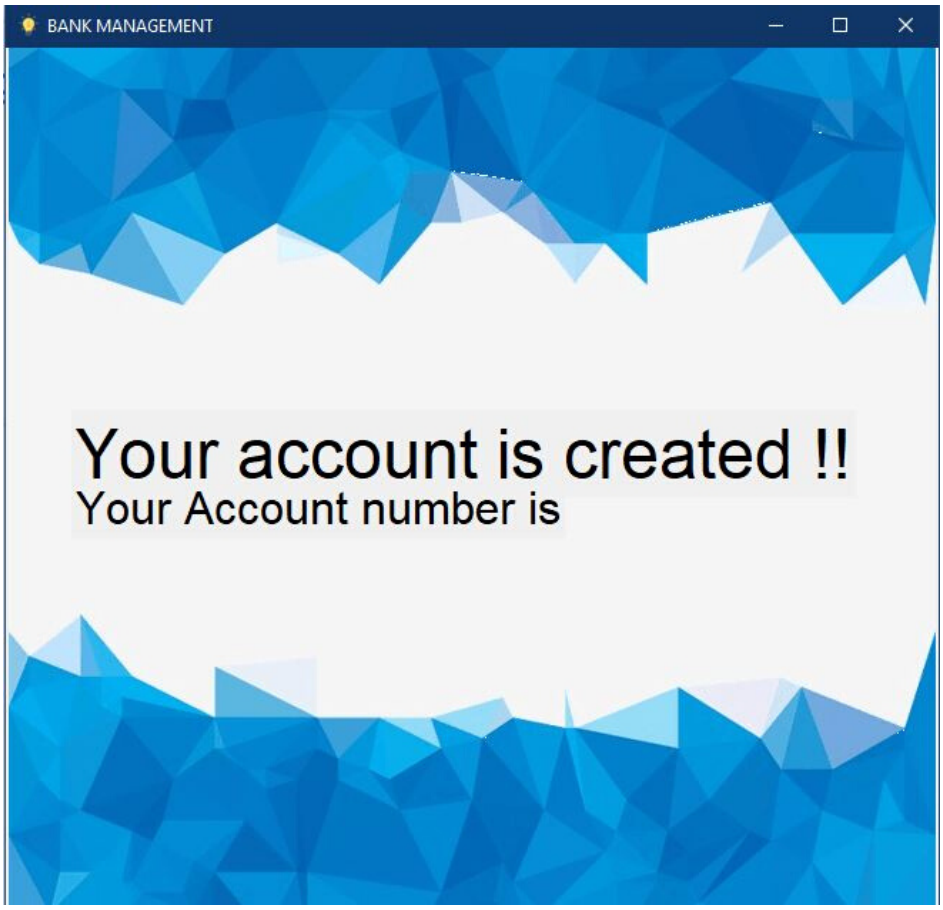
Opening Page



Registration



Account created

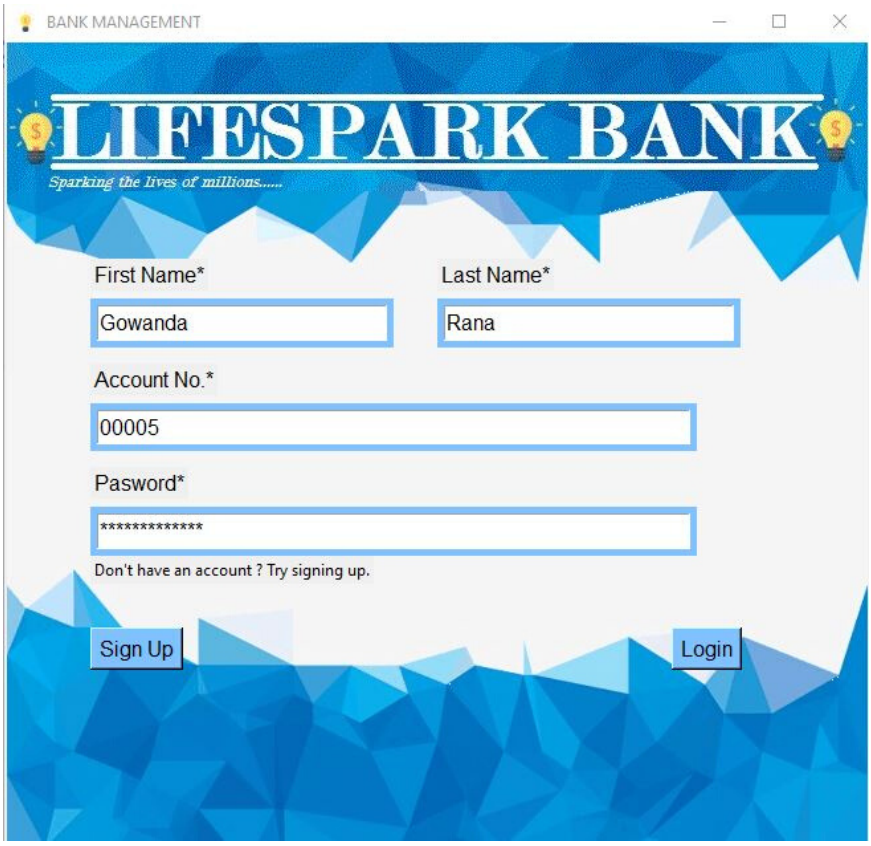


Data Added in Mysql

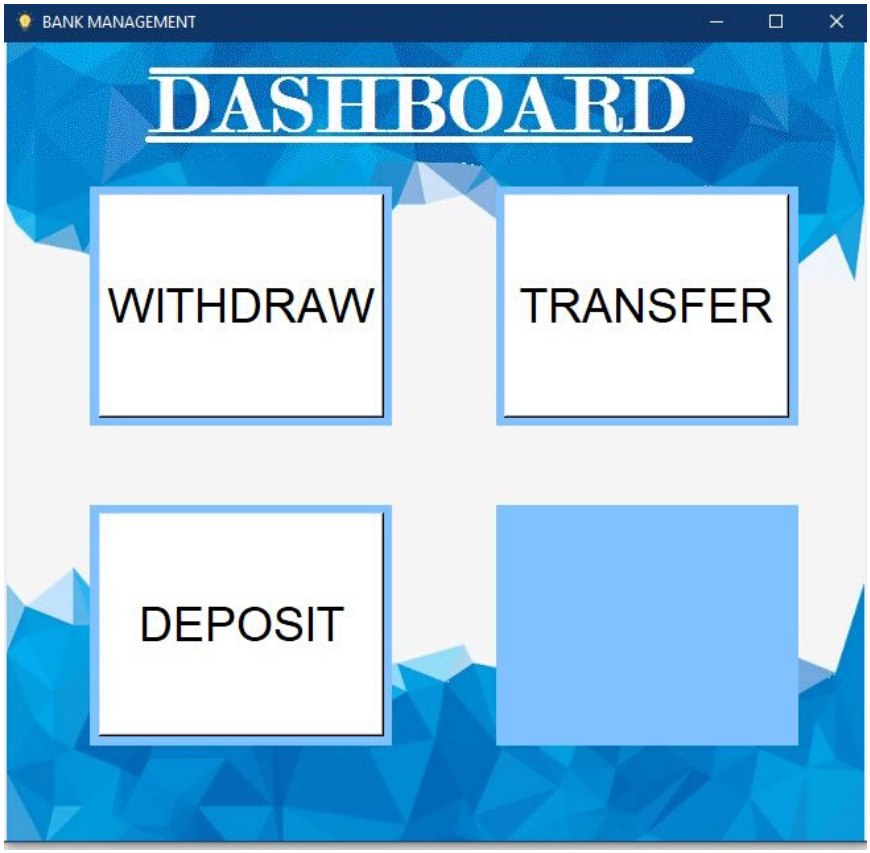
```
+-------+--------------+---------+------------+---------------+-----------------------+-----------+-----
| Accno | fname        | lname   | DOB        | Mobile_number | email                 | City      | PIN
+-------+--------------+---------+------------+---------------+-----------------------+-----------+-----
| 00001 | Ishan        | Singh   | 2002-01-19 | 7247820320    | ishan8singh@gmail.com | Noida     |  20
| 00002 | Gopal Krishna| Gautam  | 1995-03-16 | 9939929709    | gopalkrishna519@gmail | New Delhi |  11
| 00003 | Isha         | Singh   | 2004-03-23 | 7247820495    | ishasingh@gmail.com   | Noida     |  20
| 00004 | Rault        | Jackson | 2000-06-06 | 8000230110    | rjackson12@gmail.com  | New Jersey|   7
| 00005 | Gowanda      | Rana    | 1995-08-06 | 8920011123    | gowarana@gmail.com    | kampala   |
| 00006 | Jessi        | Ryder   | 1991-01-31 | 7899106551    | jessiryder66@gmail.com| Pune      |  41
+-------+--------------+---------+------------+---------------+-----------------------+-----------+-----
6 rows in set (0.00 sec)

mysql> SELECT * FROM accounts;
+-------+--------------+-------------+------------+---------------+-----------------------+-----------
| Accno | fname        | lname       | DOB        | Mobile_number | email                 | City
+-------+--------------+-------------+------------+---------------+-----------------------+-----------
| 00001 | Ishan        | Singh       | 2002-01-19 | 7247820320    | ishan8singh@gmail.com | Noida
| 00002 | Gopal Krishna| Gautam      | 1995-03-16 | 9939929709    | gopalkrishna519@gmail | New Delhi
| 00003 | Isha         | Singh       | 2004-03-23 | 7247820495    | ishasingh@gmail.com   | Noida
| 00004 | Rault        | Jackson     | 2000-06-06 | 8000230110    | rjackson12@gmail.com  | New Jersey
| 00005 | Gowanda      | Rana        | 1995-08-06 | 8920011123    | gowarana@gmail.com    | kampala
| 00006 | Jessi        | Ryder       | 1991-01-31 | 7899106551    | jessiryder66@gmail.com| Pune
| 00009 | Lal          | Singh Chadda| 1968-12-25 | 9110011202    | lal25singh@yahoo      | Amritsar
+-------+--------------+-------------+------------+---------------+-----------------------+-----------
```

Login



After signing in, dashboard



Withdraw

In Mysql, money has been withdrawn

```
accounts;
+-------------+------------+---------------+----------------------+-----------+---------+----------------+
| lname       | DOB        | Mobile_number | email                | City      | PINCODE | Balance_amount |
+-------------+------------+---------------+----------------------+-----------+---------+----------------+
| Singh       | 2002-01-19 | 7247820320    | ishan8singh@gmail.com | Noida     |  201301 |       10000000 |
| Gautam      | 1995-03-16 | 9939929709    | gopalkrishna519@gmail | New Delhi |  110068 |       50000000 |
| Singh       | 2004-03-23 | 7247820495    | ishasingh@gmail.com   | Noida     |  201301 |        3000000 |
| Jackson     | 2000-06-06 | 8000230110    | rjackson12@gmail.com  | New Jersey|   70011 |           4000 |
| Rana        | 1995-08-06 | 8920011123    | gowarana@gmail.com    | kampala   |     256 |           6000 |
| Ryder       | 1991-01-31 | 7899106551    | jessiryder66@gmail.com| Pune      |  411001 |          78000 |
| Singh Chadda| 1968-12-25 | 9110011202    | lal25singh@yahoo      | Amritsar  |  143001 |          19650 |
+-------------+------------+---------------+----------------------+-----------+---------+----------------+
ec)

accounts;
+-------------+------------+---------------+----------------------+-----------+---------+----------------+
| lname       | DOB        | Mobile_number | email                | City      | PINCODE | Balance_amount |
+-------------+------------+---------------+----------------------+-----------+---------+----------------+
| Singh       | 2002-01-19 | 7247820320    | ishan8singh@gmail.com | Noida     |  201301 |       10000000 |
| Gautam      | 1995-03-16 | 9939929709    | gopalkrishna519@gmail | New Delhi |  110068 |       50000000 |
| Singh       | 2004-03-23 | 7247820495    | ishasingh@gmail.com   | Noida     |  201301 |        3000000 |
| Jackson     | 2000-06-06 | 8000230110    | rjackson12@gmail.com  | New Jersey|   70011 |           4000 |
| Rana        | 1995-08-06 | 8920011123    | gowarana@gmail.com    | kampala   |     256 |           5500 |
| Ryder       | 1991-01-31 | 7899106551    | jessiryder66@gmail.com| Pune      |  411001 |          78000 |
| Singh Chadda| 1968-12-25 | 9110011202    | lal25singh@yahoo      | Amritsar  |  143001 |          19650 |
+-------------+------------+---------------+----------------------+-----------+---------+----------------+
ec)
```

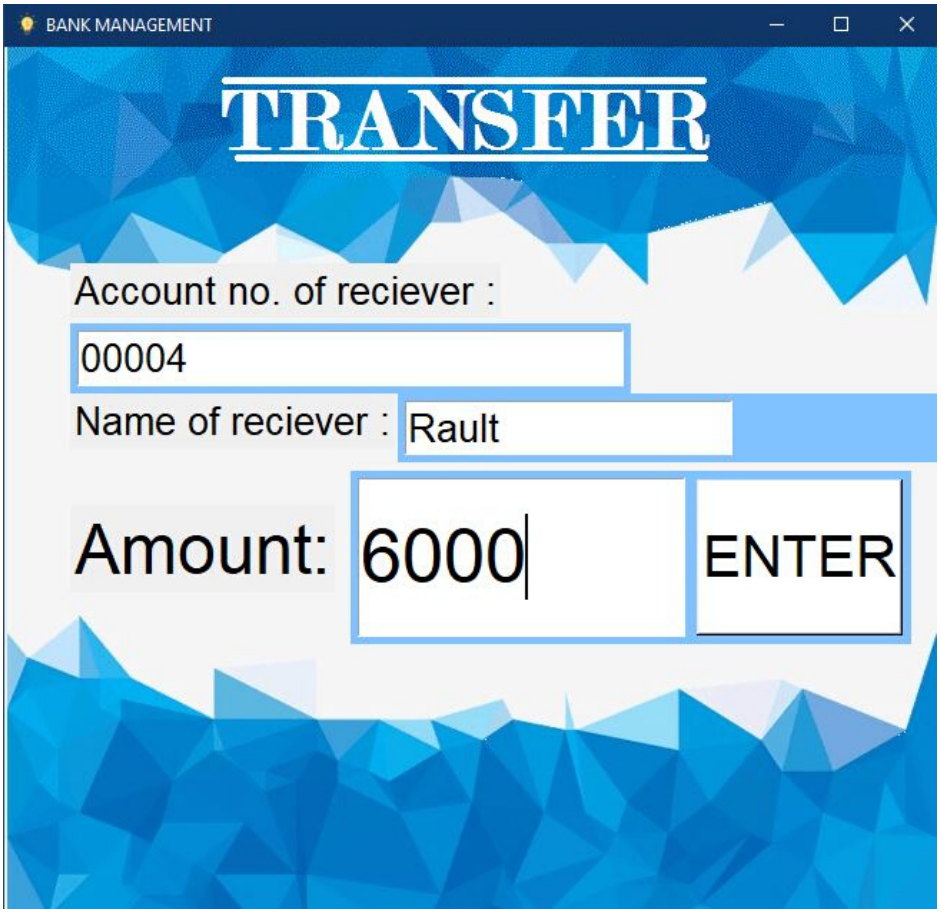
Deposit

Money has been deposited in Mysql database

```
accounts;
---+--------------+------------+---------------+------------------------+------------+---------+----------------+
   | lname        | DOB        | Mobile_number | email                  | City       | PINCODE | Balance_amount |
---+--------------+------------+---------------+------------------------+------------+---------+----------------+
   | Singh        | 2002-01-19 | 7247820320    | ishan8singh@gmail.com  | Noida      |  201301 |       10000000 |
na | Gautam       | 1995-03-16 | 9939929709    | gopalkrishna519@gmail  | New Delhi  |  110068 |       50000000 |
   | Singh        | 2004-03-23 | 7247820495    | ishasingh@gmail.com    | Noida      |  201301 |        3000000 |
   | Jackson      | 2000-06-06 | 8000230110    | rjackson12@gmail.com   | New Jersey |   70011 |           4000 |
   | Rana         | 1995-08-06 | 8920011123    | gowarana@gmail.com     | kampala    |     256 |           5500 |
   | Ryder        | 1991-01-31 | 7899106551    | jessiryder66@gmail.com | Pune       |  411001 |          78000 |
   | Singh Chadda | 1968-12-25 | 9110011202    | lal25singh@yahoo       | Amritsar   |  143001 |          19650 |
---+--------------+------------+---------------+------------------------+------------+---------+----------------+
ec)

accounts;
---+--------------+------------+---------------+------------------------+------------+---------+----------------+
   | lname        | DOB        | Mobile_number | email                  | City       | PINCODE | Balance_amount |
---+--------------+------------+---------------+------------------------+------------+---------+----------------+
   | Singh        | 2002-01-19 | 7247820320    | ishan8singh@gmail.com  | Noida      |  201301 |       10000000 |
na | Gautam       | 1995-03-16 | 9939929709    | gopalkrishna519@gmail  | New Delhi  |  110068 |       50000000 |
   | Singh        | 2004-03-23 | 7247820495    | ishasingh@gmail.com    | Noida      |  201301 |        3000000 |
   | Jackson      | 2000-06-06 | 8000230110    | rjackson12@gmail.com   | New Jersey |   70011 |           4000 |
   | Rana         | 1995-08-06 | 8920011123    | gowarana@gmail.com     | kampala    |     256 |          16000 |
   | Ryder        | 1991-01-31 | 7899106551    | jessiryder66@gmail.com | Pune       |  411001 |          78000 |
   | Singh Chadda | 1968-12-25 | 9110011202    | lal25singh@yahoo       | Amritsar   |  143001 |          19650 |
---+--------------+------------+---------------+------------------------+------------+---------+----------------+
ec)
```

Transferring money from one account to another



Money has been transferred from one account to another

```
s;
+-----------+------------+---------------+-----------------------+-----------+---------+-----------------+
ame         | DOB        | Mobile_number | email                 | City      | PINCODE | Balance_amount  |
+-----------+------------+---------------+-----------------------+-----------+---------+-----------------+
ngh         | 2002-01-19 | 7247820320    | ishan8singh@gmail.com | Noida     |  201301 |        10000000 |
utam        | 1995-03-16 | 9939929709    | gopalkrishna519@gmail | New Delhi |  110068 |        50000000 |
ngh         | 2004-03-23 | 7247820495    | ishasingh@gmail.com   | Noida     |  201301 |         3000000 |
ckson       | 2000-06-06 | 8000230110    | rjackson12@gmail.com  | New Jersey|   70011 |            4000 |
na          | 1995-08-06 | 8920011123    | gowarana@gmail.com    | kampala   |     256 |           16000 |
der         | 1991-01-31 | 7899106551    | jessiryder66@gmail.com| Pune      |  411001 |           78000 |
ngh Chadda  | 1968-12-25 | 9110011202    | lal25singh@yahoo      | Amritsar  |  143001 |           19650 |
+-----------+------------+---------------+-----------------------+-----------+---------+-----------------+


s;
+-----------+------------+---------------+-----------------------+-----------+---------+-----------------+
ame         | DOB        | Mobile_number | email                 | City      | PINCODE | Balance_amount  |
+-----------+------------+---------------+-----------------------+-----------+---------+-----------------+
ngh         | 2002-01-19 | 7247820320    | ishan8singh@gmail.com | Noida     |  201301 |        10000000 |
utam        | 1995-03-16 | 9939929709    | gopalkrishna519@gmail | New Delhi |  110068 |        50000000 |
ngh         | 2004-03-23 | 7247820495    | ishasingh@gmail.com   | Noida     |  201301 |         3000000 |
ckson       | 2000-06-06 | 8000230110    | rjackson12@gmail.com  | New Jersey|   70011 |           10000 |
na          | 1995-08-06 | 8920011123    | gowarana@gmail.com    | kampala   |     256 |           10000 |
der         | 1991-01-31 | 7899106551    | jessiryder66@gmail.com| Pune      |  411001 |           78000 |
ngh Chadda  | 1968-12-25 | 9110011202    | lal25singh@yahoo      | Amritsar  |  143001 |           19650 |
+-----------+------------+---------------+-----------------------+-----------+---------+-----------------+
```

BiblioGraphy

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