ACKNOWLEDGEMENT

I understood this Project work, as the part of my XII Computer Science course. I had tried to apply my best of knowledge and experience, gained during the study and class work experience. However, developing software system is generally a quite complex and time-consuming process. It requires a systematic study, insight vision and professional approach during the design and development. Moreover, the developer always feels the need, the help and good wishes of the people near you, who have considerable experience and idea.

I would like to extend my sincere thanks and gratitude to my teacher **MS. SARITA CHAUHAN**. I am very thankful to our Principal **MS. SEEMA KASUMRA** for giving valuable time and moral support to develop this software.

AMEYA ATREYA

CODING OF PROGRAM

CREATING ACCOUNT

```
#Importing modules
import csv
import random
import datetime

#Field Names
Bank_fields = ["Account No.","Account Holder", "Account type","Current Balance","Contact
No.","Email","Address","Account Opening Date","Account Status","Pin"]

#Name of the csv file
Bank_database = "bankrecord.csv"

#Defining functions
def add_account():
    print("\n-------------------------")
    print("     Open Bank Account   ")
    print("-------------------------")
    global Bank_fields
    global Bank_database

    with open(Bank_database,'w') as f:
        Customer_data = []
        b_w = csv.writer(f)
        b_w.writerow(Bank_fields)
        ch = "y"
        t_date = datetime.datetime.now()
        while ch == "y":
            acc_no = random.randrange(100000,999999)
            print("The Account Number :",acc_no)
            hol = input("Enter Account Holder Name: ").upper()
            acc_typ = input("Enter Account type: ").upper()
            bal = float(input("Enter Total Balance: \u20B9"))
            con_no = int(input("Enter contact number: +91 "))
            email = input("Enter Email Address: ")
            add = input("Enter Address: ").upper()
            op_date = t_date
            op_date1 = print("Account Opening Date/Time(YYYY-MM-DDHH:MM:SS):",t_date)
```

```
            acc_sat = "ACTIVE"
            pin = random.randrange(1000,9999)
            pn = print("Pin number: ",pin)
            L = [acc_no,hol,acc_typ,float(bal),con_no,email,add,op_date,acc_sat,pin]
            Customer_data.append(L)
            Customer_data.sort()
            print("Customer Data Added Succesfully")
            ch = input("Do you want to add more record Y/N: ").lower()
        b_w.writerows(Customer_data)
```

SEARCHING RECORD

```
def search():
    print("\n-----------------------")
    print("    Customer Enquiry   ")
    print("-----------------------")

    Name = input("Enter Customer Name You Want To Search: ").upper()
    with open(Bank_database,'r') as f:
        b_r = csv.reader(f)
        count = 0
        for i in b_r:
            if len(i) > 1:
                if str(i[1])== Name:
                    print(i[0:9])
                    count+=1
        if count == 0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
```

DISPLAY ALL RECORDS

```
def display():
    print("\n------------------------")
    print("        Bank Data       ")
    print("------------------------")

    with open(Bank_database,'r') as f:
        b_r = csv.reader(f)
        for i in b_r:
            print(i)
```

BALANCE INQUIRY

```
def bal_en():
    print("\n------------------------")
    print("     Balance Enquiry    ")
    print("------------------------")

    name = input("Enter Customer Name for Balance Enquiry: ").upper()
    with open(Bank_database,'r') as f:
        b_r = csv.reader(f)
        count = 0
        l=[]
        for i in b_r:
            next(b_r)
            if len(i) > 1:
                if i[1] == name:
                    print("Bank Balance: \u20B9",i[3])

                    count+=1
        if count==0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
    return
```

DEPOISTING MONEY

```
def credit():
    print("\n----------------------")
    print("        Deposit       ")
    print("----------------------")

    name = input("Enter Customer Name for deposit: ").upper()
    amd = float(input("Enter amount to be credited : \u20B9"))
    with open(Bank_database,'r+') as f:
        l=[]
        b_r = csv.reader(f)
        count = 0
        for i in b_r:
            next(b_r)
            if len(i) > 1:
                if i[1] == name:
                    i[3] = float(i[3])+amd
                    print('\u20b9',amd,'has been succesfully credited to your account')
                    print("Current Balance: \u20B9",i[3])
                    count+=1
                    l.append(i)
                else:
                    l.append(i)
        update(l)
        if count==0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
    return
```

UPDATE

```
def update(a):
     with open(Bank_database,'w') as f:
        b_w = csv.writer(f)
        b_w.writerows(a)
```

WITHDRAWING MONEY

```
def debit():
    print("\n-----------------------")
    print("        Withdraw       ")
    print("-----------------------")

    name = input("Enter Customer Name for withdrawal: ").upper()
    amw = float(input("Enter amount to be debited : \u20B9"))
    with open(Bank_database,'r+') as f:
        l=[]
        b_r = csv.reader(f)
        count = 0
        for i in b_r:
            if len(i) > 1:
                if i[1] == name:
                    i[3] = float(i[3])-amw
                    print('\u20b9',amw,'has been succesfully debited from your account')
                    print("Current Balance: \u20B9", i[3])
                    count+=1
                    l.append(i)
                else:
                    l.append(i)
        update(l)
        if count==0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
    return
```

UPDATE CONTACT NUMBER

```
def up_con():
    print("\n-------------------------------------")
    print("         Contact Number Updation      ")
    print("-------------------------------------")

    name = input("Enter Customer Name for contact Number Updation : ").upper()
    cn = int(input("Enter contact number: "))
    with open(Bank_database,'r+') as f:
        l=[]
        b_r = csv.reader(f)
        count = 0
        for i in b_r:
            if len(i) > 1:
                if i[1] == name:
                    i[4] = cn
                    print("Contact Number has been successfully updaated")
                    count+=1
                    l.append(i)
                else:
                    l.append(i)
        update(l)
        if count==0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
    return
```

UPDATE EMAIL ADDERESS

```
def up_email():
    print("\n-------------------------------------")
    print("         Email Address Updation      ")
    print("-------------------------------------")

    name = input("Enter Customer Name for Email Updation : ").upper()
    em = input("Enter Email Address: ")
    with open(Bank_database,'r+') as f:
        l=[]
        b_r = csv.reader(f)
        count = 0
        for i in b_r:
            if len(i) > 1:
                if i[1] == name:
                    i[5] = em
                    print("Email Address has been successfully updaated")
                    count+=1
                    l.append(i)
                else:
                    l.append(i)
        update(l)
        if count==0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
    return
```

UPDATE RESIDENTIAL ADDERESS

```
def up_add():
    print("\n------------------------------")
    print("         Address Updation      ")
    print("------------------------------")

    name = input("Enter Customer Name for Address Updation : ").upper()
    add = input("Enter Residential Address: ")
    with open(Bank_database,'r+') as f:
        l=[]
        b_r = csv.reader(f)
        count = 0
        for i in b_r:
            if len(i) > 1:
                if i[1] == name:
                    i[6] = add
                    print("Address has been successfully updaated")
                    count+=1
                    l.append(i)
        update(l)
        if count==0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
    return
```

DELETING ACCOUNT

```
def deln():
    print("\n-------------------------------")
    print("         Account Deletion      ")
    print("-------------------------------")

    name = input("Enter Customer Name for Account Deletion : ").upper()
    with open(Bank_database,'r+') as f:
        l=[]
        b_r = csv.reader(f)
        count = 0
        for i in b_r:
            if len(i) > 1:
                if i[1] != name:
                    count+=1
                    l.append(i)
        update(l)
        if count==0:
            print('No Customer Data Found!')
            input('\nPress any key to continue')
    return
```

MAIN MENU

```
#Creating Admin and Customer Window
while True:
    print("\n1.Admin Login")
    print("2.Customer Login\n")

    ch = input("Enter your choice: ")
    if (ch == "1"):
        print("\nEnter User-id and Password")
        us = "admin@123"
        pss = "abg"
        us_id = input("User-ID: ")
        pas = input("Password: ")
        if (us==us_id) and (pss==pss):
            while True:
                print("\n ----- Welcome Admin ----- ")
                print("\n1. Add Bank account to database")
                print("2. Search Customer")
                print("3. Display all records")
                print("4. Update Contact Number")
                print("5. Update Email Address")
                print("6. Update Residential Address")
                print("7. Delete Customer Record")
                print("8. Logout")
                print("\n")
                ch1 = int(input("Enter your choice: "))
                if (ch1==1):
                    add_account()
                elif (ch1==2):
                    search()
                elif (ch1==3):
                    display()
                elif (ch1==4):
                    up_con()
                elif (ch1==5):
                    up_email()
                elif (ch1==6):
                    up_add()
                elif (ch1==7):
                    deln()
                elif (ch1==8):
                    print("You have successfully loged out")
```

```
                break
            else:
                print("You have chosen invalid option")
    else:
        print("Invalid credential")

elif (ch=="2"):
    while True:
        print("\n1. Balance Enquiry")
        print("2. Credit")
        print("3. Debit")
        print("4. Update Contact Number")
        print("5. Update Email Address")
        print("6. Update Residential Address")
        print("7. Search Details")
        print("8. Exit")
        print("\n")
        ch2 = int(input("Enter your choice: "))
        if (ch2==1):
            bal_en()
        elif (ch2==2):
            credit()
        elif (ch2==3):
            debit()
        elif (ch2==4):
            up_con()
        elif (ch2==5):
            up_email()
        elif (ch2==6):
            up_add()
        elif (ch2==7):
            search()
        elif (ch2==8):
            break
        else:
            print("Invalid Option")
else:
        print(" Invalid Option ")
```

OUTPUT

```
                    TOPIC : BANK MANGEMENT SYSTEM

                    MADE BY : AMEYA ATREYA
                              AND
                              GYAN DUBEY

                    SUBMITTED TO : MS. SARITA CHAUHAN

 *-------------------------------------------------* WELCOME *-------------------------------------------------------*

1.Admin Login
2.Customer Login

Enter your choice: 1

Enter User-id and Password
User-ID: admin@123
Password: abg

 ----- Welcome Admin -----

1. Add Bank account to database
2. Search Customer
3. Display all records
4. Update Contact Number
5. Update Email Address
6. Update Residential Address
7. Delete Customer Record
8. Logout
```

```
Enter your choice: 1

-------------------------
     Open Bank Account
-------------------------
The Account Number : 669741
Enter Account Holder Name: AMEYA ATREya
Enter Account type: save
Enter Total Balance: ₹50000
Enter contact number: +91 8448835989
Enter Email Address: ameya06@gmail.com
Enter Address: Noida
Account Opening Date/Time(YYYY-MM-DD HH:MM:SS): 2022-11-22 20:52:08.343950
Pin number:  6676
Customer Data Added Succesfully
Do you want to add more record Y/N:
```

```
Enter your choice: 2


----------------------
   Customer Enquiry
----------------------
Enter Customer Name You Want To Search: ameya atreya
['669741', 'AMEYA ATREYA', 'SAVE', '50000.0', '8448835989', 'ameya06@gmail.com', 'NOIDA', '2022-11-22 20:52:08.343950', 'ACTIVE']
```

```
Enter your choice: 3

----------------------
      Bank Data
----------------------
['Account No.', 'Account Holder', 'Account type', 'Current Balance', 'Contact No.', 'Email', 'Address', 'Account Opening Date', 'Account Status', 'Pin']
[]
['528011', 'ANOS VECRON', 'SAVE', '5000000789.0', '8787429567', 'Dihalde', 'DEMOWORLD', '2022-11-22 20:52:08.343950', 'ACTIVE', '9420']
[]
['529037', 'ANIKA ATREYA', 'SAVE', '5852878.0', '9117745936', 'anika09@gmail.com', 'NOIDA', '2022-11-22 20:52:08.343950', 'ACTIVE', '6185']
[]
['669741', 'AMEYA ATREYA', 'SAVE', '50000.0', '8448835989', 'ameya06@gmail.com', 'NOIDA', '2022-11-22 20:52:08.343950', 'ACTIVE', '6676']
[]
```

```
Enter your choice: 4

---------------------------------------
         Contact Number Updation
---------------------------------------
Enter Customer Name for contact Number Updation : Anos vecron
Enter contact number: 9525333300
Contact Number has been successfully updaated
```

```
Enter your choice: 5

---------------------------------------
         Email Address Updation
---------------------------------------
Enter Customer Name for Email Updation : Anika atreya
Enter Email Address: anikaatreya05@gmail.com
Email Address has been successfully updaated
```

```
Enter your choice: 6

------------------------------
         Address Updation
------------------------------
Enter Customer Name for Address Updation : Ameya Atreya
Enter Residential Address: Gokuldham
Address has been successfully updaated
```

```
Enter your choice: 8
You have successfully loged out
```

```
1.Admin Login
2.Customer Login

Enter your choice: 2

1. Balance Enquiry
2. Credit
3. Debit
4. Update Contact Number
5. Update Email Address
6. Update Residential Address
7. Search Details
8. Exit


Enter your choice: 1

------------------------
     Balance Enquiry
------------------------
Enter Customer Name for Balance Enquiry: Ameya atreya
Bank Balance: ₹ 500000.0
```

```
Enter your choice: 2

----------------------
        Deposit
----------------------
Enter Customer Name for deposit: Ameya atreya
Enter amount to be credited : ₹50000
₹ 50000.0 has been succesfully credited to your account
Current Balance: ₹ 550000.0
```

```
Enter your choice: 3

-----------------------
        Withdraw
-----------------------
Enter Customer Name for withdrawal: Ameya atreya
Enter amount to be debited : ₹5854
₹ 5854.0 has been succesfully debited from your account
Current Balance: ₹ 544146.0
```

BIBLIOGRAPHY

Books

- Computer Science with Python – Preeti Arora