

# AIR FORCE GOLDEN JUBILEE INSTITUTE



## PROJECT REPORT ON BANK MANAGEMENT SYSTEM

VISHAL BHARDWAJ  
XII-A

# **ACKNOWLEDGEMENT**

I take this opportunity to express deep gratitude and sincere thanks to my Computer Science teacher Mrs. Mohini Arora who guided me to complete this project successfully. I would like to thank her for her valuable guidance and constant encouragement, constructive attitude and immense motivation which has sustained my effort at all stages of this project work.

Last but not the least I extend my sincere thanks to the computer lab assistant Mr. Surender Singh for helping me towards the successful completion of this project.

Vishal Bhardwaj

Class XII-A

Date:

# **CERTIFICATE**

This is to certify that the Computer Science project on Bank Management System has been submitted by Vishal Bhardwaj, Roll number\_\_\_\_\_ of class XII A. This will be assessed during practical examination conducted by the Central Board of Secondary Education (CBSE) in the academic year 2021 -22.

Date:

Mrs. Mohini Arora  
HOD Computer Science  
Air Force Golden Jubilee Institute

# INTRODUCTION TO THE PROJECT

Banking services are the nerves of any country's economy. Each of us uses them in one way or other. During the pandemic , Banks were one of the essential sectors that continued to provide their services for public welfare and supported the economy to pass through the worst phase of this century.

On-line facility to customers from account opening to doing transaction from the comfort of their home is certainly a big relief to them.

In my project on "Bank Management System", I have tried to incorporate the basic features of banking.

## SALIENT FEATURES:

### ➤ PERMANENT STORAGE

Data is stored in the MySQL Database linked with the program.

### ➤ PASSWORD PROTECTION

Admin account is password protected that can be accessed by Bank officials only.

### ➤ USER-FRIENDLY FORMAT

Various information is provided in user friendly format like Tables, spaced paragraphs, etc.

### ➤ DISPLAY

Two types of display ,i.e. Selective and Complete Display help the customer to easily access data.

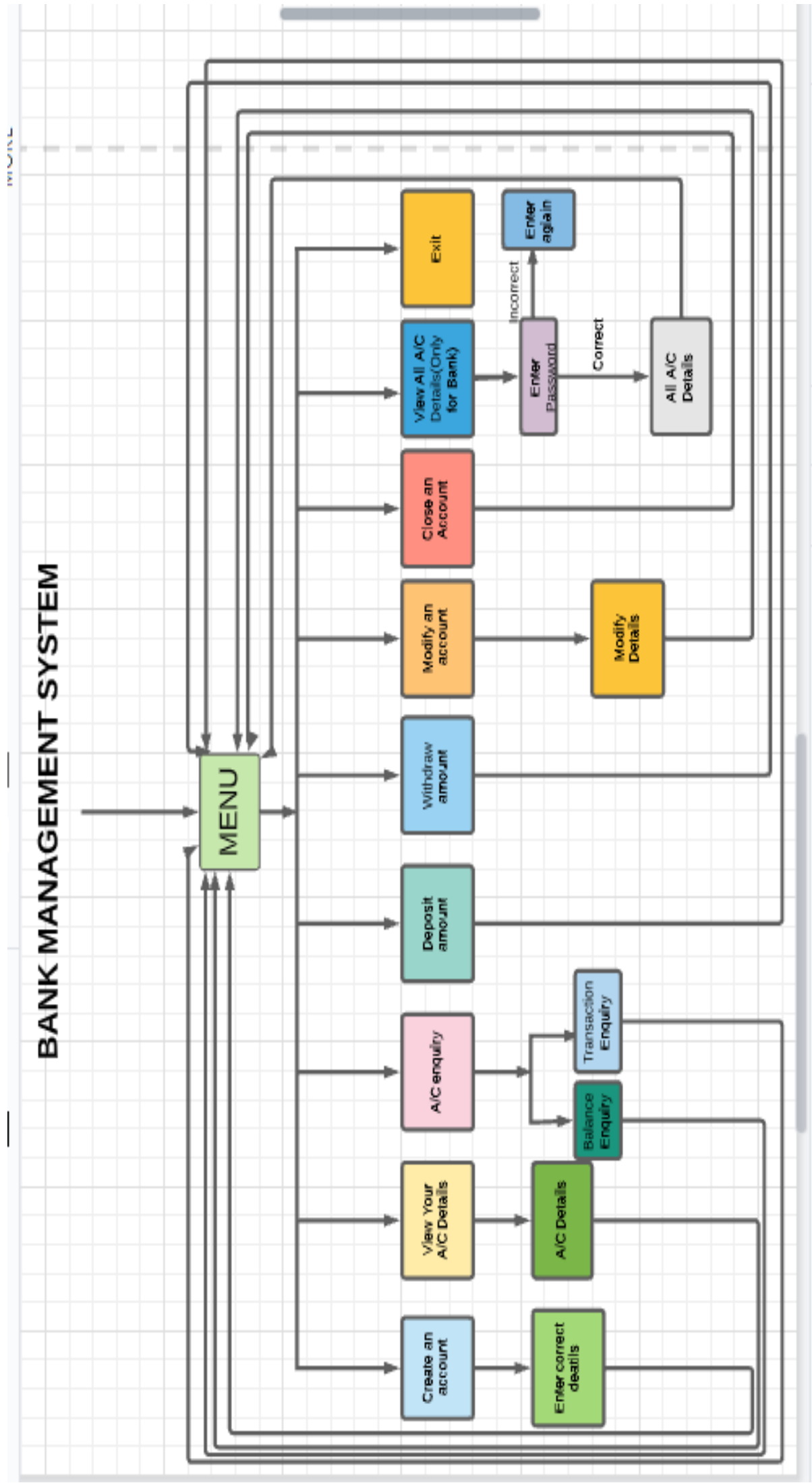
➤ **MODIFICATION**

A/C details can be easily modified using A/C Number.

➤ **DELETION**

Customers can close their account using A/C Number if they have no money saved in their A/C.

# PROJECT MAP



# **Hardware / Software Requirements**

## Minimum Requirements:

- Windows 7 and Above
- Intel core i3 or AMD Ryzen 5 and above
- Python version 3.9.1 and above
- MySQL Version 8.0 with python connectivity
- 256 GB of storage (preferable)
- RAM: 2 GB (Minimum)

# LIST OF VARIOUS MODULES AND THEIR BUILTIN FUNCTIONS USED

- i. **append(element):** It is used to add a single item to the existing list.
- ii. **mysql.connector:** It provide python connectivity to the MySQL databases.
  - a) **connect():** The connect() function of mysql.connector establishes connection to a MySQL database and takes four parameters:  
<connection-object>=mysql.connector.connect(  
    (**host**=<host-name>,**user**=<user- name>,  
    **passwd**=<password>,**database**=<database>)
- iii. **Cursor object:** It is a special control structure that helps in the processing of data row by row.
- iv. **execute():** It is used to execute SQL queries with cursor object.  
<cursorobject>.execute(<sql query>)
- v. **fetch():** It is used to extract the dataset from the results stored in cursorobject .
  - a)<data>=<cursor>.fetchall()
- vi. **commit():** It is used to make the changes made to database through queries permanent.
- vii. **Datetime Module:** The datetime module deals with manipulating dates and times. In our program, it helps us organize time slots in a special data type and generate further time slots automatically.
  - a) **datetime.now():** Returns the current local date and time.
- viii. **Random Module:** It is used to generate a random value.
  - a) random.random(): random floating point number between 0 and 1.
  - b) random.randrange(x,y): Random integers between x and y.



# SOURCE CODE

#Vishal Bhardwaj Project 2nd Term

```
import mysql.connector as mysqlt #1st diference in module
import datetime
from prettytable import PrettyTable
mycon=mysqlt.connect(host="localhost",user="root",passwd
="Vp#12345")
cursor=mycon.cursor()
cursor.execute("Use Bank")
print()
print()
print("*****
BANK MANAGEMENT SYSTEM
*****
****")
print()
print("_____
_____
_____")
print()
print()
print("_____ Welcome !!!")
def mainmenu():

    print()
    print("_____ Main Menu")
    print()

    print("_____ 1. Create an account\n",
    "_____ 2. View Your A/C Details\n",
    "_____ 3. A/C enquiry\n",
    "_____ 4. Deposit amount\n",
    "_____ 5. Withdraw amount\n",
    "_____ 6. Modify an account\n",
    "_____ 7. Close an Account\n",
    "_____ 8. View All A/C Details(Only for Bank)\n",
    "_____ 9. Exit")
    print()
    print()
```

```

def create():
    print("***** Account Creation
*****")

    print()
    print(" Please fill the details carefully  ")
    print()

    L1=["Customer ID","Account
Number","Name","Balance","Age","Father's Name","Mother's
Name","Gender","Mobile Number",
    "Address","Type of Account","Educational
Qualification","Occupation","Income","Email ID"]

    #C1=csv.writer(f,delimiter=",")
    #C1.writerow(L1)
    while True:

        try:
            namef=input("Enter First Name: ")
            print()
        except ValueError:
            print("Wrong input. Please enter again! ")
            print()
            continue
        except TypeError:
            print("Wrong input. Please enter again! ")
            print()
            continue
        except EOFError:
            pass
        try:
            namem=input("Enter Middle Name(Optional,Press
Enter if N/A ): ")
            print()
            namel=input("Enter Last Name: ")
            print()
        except ValueError:
            print("Wrong input. Please enter again! ")
            print()
            continue
        except TypeError:
            print("Wrong input. Please enter again! ")

```

XJK

```
print()
    continue
except EOFError:
    pass
if namem!="":
    name=namef+" "+namem+" "+namel
elif namem=="":
    name=namef+" "+namel
while True:
    try:
        age=int(input("Enter Age: "))
        print()

    except ValueError:
        print("Wrong input. Please enter again! ")
        print()
        continue
    except TypeError:
        print("Wrong input. Please enter again! ")
        print()
        continue
    except EOFError:
        pass
    else:
        break
gender=input("Gender(M/F): ")
print()
Fname=input("Enter Father's Name: ")
print()
Mname=input("Enter Mother's Name: ")
print()

while True:
    mno=input("Enter mobile number: ")
    if len(mno)!=10:
        print("Please enter valid mobile number!")
        print()
        continue
    else:
        break
```

```

print()
address=input("Enter Residential Address: ")
print()
print()
print("          Choose Type of Account")
print(" 1. Saving\n", "2. Term Deposit\n", "3. Current")
print()
while True:
    try:
        ch=int(input(" (1/2/3): "))
        print()
        if ch==1 or ch==2:
            print(" Enter any one of these ID proofs ")
            print()
            print(" 1.Aadhar No.\n", "2.Passport
No.\n", "3.Driving License No.\n", "4.Election Card No.\n"
            , "5.NREGA Card No.")
            print()
            while True:
                try:
                    ch2=int(input("(1/2/3/4/5): "))
                    print()
                    if ch2==1:
                        adno=input("Enter Aadhar No: ")
                        print()
                    elif ch2==2:
                        passno=input("Enter Passport No.: ")
                        print()
                    elif ch2==3:
                        dno=input("Enter Driving License No.: ")
                        print()
                    elif ch2==4:
                        eno=input("Enter Election Card No.: ")
                        print()
                    elif ch2==5:
                        nno=input("Enter NREGA Card No.: ")
                        print()
                    else:
                        print("Please Enter valid Choice!")
                        print()
                        continue

```

```
except ValueError:
```

```
    print("Wrong input. Please enter again! ")
```

```
    print()
```

```
    continue
```

```
except TypeError:
```

```
    print("Wrong input. Please enter again! ")
```

```
    print()
```

```
    continue
```

```
except EOFError:
```

```
    pass
```

```
else:
```

```
    break
```

```
elif ch==3:
```

```
    gstno=int(input("Enter GST Registration  
Number"))
```

```
    print()
```

```
    PAN=int(input("Enter PAN of Firm: "))
```

```
    print()
```

```
else:
```

```
    print("Please enter valid choice!")
```

```
    print()
```

```
    continue
```

```
if ch==1:
```

```
    typeacc="Saving"
```

```
elif ch==2:
```

```
    typeacc="Term Deposit"
```

```
elif ch==3:
```

```
    typeacc="Current"
```

```
except ValueError:
```

```
    print(" Please enter valid choice! ")
```

```
    print()
```

```
    continue
```

```
except TypeError:
```

```
    print(" Please enter valid choice! ")
```

```
    print()
```

```
    continue
```

```
except EOFError:
```

```
    pass
```

```
else:
```

```
    break
```

```
print(" Educational Qualification")
```

```

print()
print(" 1. Illiterate\n", "2. Metric\n", "3.
Intermediate\n", "4. Graduate\n", "5. Post Graduate\n",
      "6. Profession(CA/MBA/Engineer)")
print()
while True:

    try:

        ch3=int(input("(1/2/3/4/5/6): "))
        print()
        if ch3==1:

            EQ="Illiterate"
            print("Please Visit Branch for A/C opening!")
            print()
        elif ch3==2:
            EQ="Metric"
        elif ch3==3:
            EQ="Intermediate"
        elif ch3==4:
            EQ="Graduate"
        elif ch3==5:
            EQ="Post Graduate"
        elif ch3==6:
            EQ="Profession"
        else:
            print("Please Enter valid Choice!")
            print()
            continue

    except ValueError:
        print("Wrong input. Please enter again! ")
        print()
        continue
    except TypeError:
        print("Wrong input. Please enter again! ")
        print()
        continue
    except EOFError:
        pass

```

else:

break

if ch3==1:

break

print(" Occupation")

print()

print(" 1. Student\n","2. Housewife\n","3. Central  
Government\n","4. State Government\n","5. PSUs\n",  
"6. Private Companies\n","7. Others")

print()

while True:

try:

ch4=int(input(" (1/2/3/4/5/6/7): "))

print()

if ch4==1:

Occ="Student"

elif ch4==2:

Occ="Housewife"

elif ch4==3:

Occ="Central Government"

elif ch4==4:

Occ="State Government"

elif ch4==5:

Occ="PSUs"

elif ch4==6:

Occ="Private Companies"

elif ch4==7:

Occ="Others"

else:

print("Please Enter valid Choice!")

print()

continue

except ValueError:

print("Wrong input. Please enter again! ")

print()

continue

except TypeError:

```
print("Wrong input. Please enter again! ")
    print()
    continue
except EOFError:
    pass
else:
    break
print(" Income(in Rs.)")
print()
print(" 1. 0-100000\n", "2. 100000-500000\n", "3. Above 5
Lakhs")
print()
while True:
    try:
        ch5=int(input(" (1/2/3): "))
        print()
        if ch5==1:
            inc="0-100000"
        elif ch5==2:
            inc="100000-500000"
        elif ch5==3:
            inc="Above 5 Lakhs"
        else:
            print("Please Enter valid Choice!")
            print()
            continue

    except ValueError:
        print("Wrong input. Please enter again! ")
        print()
        continue
    except TypeError:
        print("Wrong input. Please enter again! ")
        print()
        continue
    except EOFError:
        pass
    else:
        break
Email=input("Enter Email Id: ")
print()
import random
```



```

import string#to genrate random letters
account=random.randint(1702009328,9838709939)
#l=len(str(ano))-2

#print(ano)
#account=ano*(10)**l
#account=str(int(account))
#print(account)
var1=random.choice(string.ascii_letters)
var2=random.choice(string.ascii_letters)
var3=random.choice(string.ascii_letters)
var4=random.choice(string.ascii_letters)
var5=var1+var2+var3+var4
num=random.randrange(12345678,98969709)
Cust_Id=var5.upper()+str(num)
#print(Cust_Id)

Bal=0

```

```

#L=[Cust_Id,account,name,Bal,age,gender,Fname,Mname,mno
,address,typeacc,EQ,Occ,inc,Email]
st="INSERT INTO Account
(Customer_ID,A_C_No,Name,Balance,Age,Gender,Father_Nam
e,Mother_Name,M_No,Address,Type_of_A_C,Education,Occu
pation,Income,Email_ID)
VALUES('{}',{},{},{},{},{},{},{},{},{},{},{},{},{},{},{})".format
(Cust_Id,account,name,Bal,age,gender,Fname,Mname,mno,ad
dress,typeacc,EQ,Occ,inc,Email)
cursor.execute(st)
mycon.commit()

#print(L)
#C1.writerow(L)
print()
print()
print("~~~~~ YOUR
ACCOUNT HAS BEEN SUCCESSFULLY CREATED
~~~~~ ")
print()
print(" YOUR CUSTOMER ID : ",Cust_Id)

```

```
print()
    print(" YOUR ACCOUNT NUMBER: ",account)
    print()
    break
```

```
def Benquiry():
```

```
    print(" ***** Balance
*****")
```

```
    print()
    cursor.execute("select * from account")
    data=cursor.fetchall()# a list containing all records as
elements
```

```
while True:
```

```
    a_c=int(input(" Enter A/C number: "))
```

```
    print()
```

```
    a=0
```

```
    Bal=0
```

```
    for x in data:
```

```
        if x[1]==a_c:
```

```
            Bal=x[3]
```

```
            print()
```

```
            a=1
```

```
    if a==0:
```

```
        print(" A/C Not Found")
```

```
        print()
```

```
        break
```

```
    elif a==1:
```

```
        print()
```

```
        print()
```

```
        print("                                Your Balance is: ",Bal)
```

```
        break
```

```
def Tenquiry():
```

```
    print(" ***** Transaction Details
*****")
```

```

print()
cursor.execute("select * from account")
data=cursor.fetchall()
cursor.execute("select * from transaction")
ndata=cursor.fetchall()

```

```

while True:

```

```

    a_c=int(input(" Enter A/C number: "))

```

```

    print()

```

```

    a=0

```

```

    Bal=0

```

```

    for x in data:

```

```

        if x[1]==a_c:

```

```

            Bal=x[3]

```

```

            print()

```

```

            a=1

```

```

            break

```

```

    if a==0:

```

```

        print(" A/C Not Found")

```

```

        print()

```

```

        print(" Enter correct A/C Number")

```

```

        print()

```

```

        continue

```

```

    elif a==1:

```

```

        print("-----Transaction details-----")

```

```

-----")

```

```

        print()

```

```

        print("          A/C Number: ",a_c)

```

```

        print()

```

```

        for x in ndata:

```

```

            if x[0]==a_c and x[1]=='deposit':

```

```

                print()

```

```

                my=PrettyTable([" Amount Deposited","On"])

```

```

                for y in x:

```

```

                    pd=x[3]

```

```

                    timed=pd[:10]

```

```

                    my.add_row([x[2],timed])

```

```

                    break

```

```

print(my)
    print()
    for x in ndata:
        if x[0]==a_c and x[1]=='withdraw':
            my1=PrettyTable([" Amount
Withdrawn","On"])
            for y in x:
                pw=x[3]
                timew=pw[:10]
                my1.add_row([x[2],timew])
                break
            print(my1)
            print()

```

```

    """print(my)
    print()
    my1=PrettyTable([" Amount
Withdrawn","On","at"])
    for y in x:
        pw=x[3]
        timew=pw[:10]
        my1.add_row([x[2],timew,x[3]])
        break
    print(my1)
    print()"""

```

```

print("  Your Balance is : ",Bal)

```

```

print()
print()
break

```

```

def Deposit():
    print(" ***** Deposit
*****")

    print()
    cursor.execute("select * from account")
    data=cursor.fetchall()

    l=[]
    Ldata=[] #new list containing every record as list
    for x in data:
        l=list(x)
        Ldata.append(l)

    while True:
        a_c=int(input(" Enter A/C number: "))
        print()
        a=0
        for x in Ldata:
            if x[1]==a_c:
                x[3]=int(x[3])
                name=input(" Enter Your Name: ")
                print()
                amount=int(input(" Enter Amount To Be Deposited:
"))
                print()
                Bal=x[3]+amount
                x[3]=Bal
                Ldata[Ldata.index(x)]=x
                a=1
        if a==0:
            print(" A/C Not Found")
            print()
            print(" Enter correct A/C Number")
            print()
            continue
        elif a==1:
            print("          Amount Deposited")

```

```

print()
    print()
    print("          Your Balance is: ",Bal)
    break
    str2="UPDATE Account SET Balance={} where
A_C_No={} ".format(Bal,a_c)
    cursor.execute(str2)
    mycon.commit()

# using now() to get current time
current_time = datetime.datetime.now()
if a==1:

    str1="INSERT INTO Transaction (
A_C_No,Deposit_Withdrawn,Amount,Time)
VALUES({},'{}',{},{}) ".format(a_c,'deposit',amount,current
_time)
    cursor.execute(str1)
    mycon.commit()

```

```

def withdraw():
    print(" ***** Withdraw
*****")

    print()
    cursor.execute("select * from account")
    data=cursor.fetchall()
    l=[]
    Ldata=[] #new list containing every record as list
    for x in data:
        l=list(x)
        Ldata.append(l)

```

```

while True:
    a_c=int(input(" Enter A/C number: "))
    print()
    a=0
    for x in Ldata:
        if x[1]==a_c:
            name=input(" Enter Your Name: ")
            print()
            while True:
                amount=int(input(" Enter Amount To Be
Withdrawn: "))
                x[3]=int(x[3])
                print()
                if x[3]==0:
                    print(" Balance: 0")
                if amount>=x[3]:

                    print(" Amount to be Withdrawn exceeds
Balance!!!" )
                    print()
                    print(" Withdraw less Amount")
                    ch4=input(" Do you wish to withdraw?(y/n): ")
                    if ch4.lower()=='y':
                        continue
                    else:
                        break
                elif amount<x[3]:

                    Bal=x[3]-amount
                    x[3]=Bal
                    Ldata[Ldata.index(x)]=x
                    a=1
                    break

            if a==0:
                print(" A/C Not Found")
                print()
                break
            elif a==1:
                print("          Amount Withdrawn")
                print()
                print()

```

```

print("      Your Balance is: ",Bal)
    break
    str2="UPDATE Account SET Balance={} where
A_C_No={} ".format(Bal,a_c)
    cursor.execute(str2)
    mycon.commit()

# using now() to get current time
current_time = datetime.datetime.now()
if a==1:

    str1="INSERT INTO Transaction (
A_C_No,Deposit_Withdrawn,Amount,Time)
VALUES({},'{}',{},{}) ".format(a_c,'withdraw',amount,current_
time)
    cursor.execute(str1)
    mycon.commit()

def menu_1():
    print("  Modify")
    print()
    print(" 1. Mobile Number\n","2. Educational
Qualification\n","3. Occupation\n","4. Income\n",
    "5. Address\n","6. Email ID")
def modify():
    print(" ***** A/C Modification
*****")

    print()
    cursor.execute("select * from account")
    data=cursor.fetchall()

while True:

    a_c=int(input(" Enter A/C Number: "))
    print()
    menu_1()
    ch=int(input(" Enter Choice to be Modified:(1-6) "))

```



```
print()
```

```
#Customer_ID,A_C_No,Name,Balance,Age,Gender,Father_Name,  
Mother_Name,M_No,Address,
```

```
#Type_of_A_C,Education,Occupation,Income,Email_ID
```

```
for x in data:
```

```
    if x[1]==a_c:
```

```
        a=1
```

```
        if ch==1:
```

```
            mobno=input(" Enter New 10-digit Mobile Number:
```

```
")
```

```
            print()
```

```
            str1="UPDATE ACCOUNT SET M_No='{ }' WHERE
```

```
A_C_No={ }".format(mobno,a_c)
```

```
            cursor.execute(str1)
```

```
            mycon.commit()
```

```
        elif ch==2:
```

```
            print(" New Educational Qualification")
```

```
            print()
```

```
            print(" 1. Illiterate\n","2. Metric\n","3.
```

```
Intermediate\n","4. Graduate\n","5. Post Graduate\n",
```

```
        "6. Profession(CA/MBA/Engineer)")
```

```
            print()
```

```
            while True:
```

```
                ch3=int(input("(1-6): "))
```

```
                print()
```

```
                if ch3==1:
```

```
                    EQ="Illiterate"
```

```
                    break
```

```
                elif ch3==2:
```

```
                    EQ="Metric"
```

```
                    break
```

```
                elif ch3==3:
```

```
                    EQ="Intermediate"
```

```
                    break
```

```
                elif ch3==4:
```

```
                    EQ="Graduate"
```

```
                    break
```

elif ch3==5:

EQ="Post Graduate"

break

elif ch3==6:

EQ="Profession"

break

else:

print(" Please Enter valid Choice!")

print()

continue

str1="UPDATE ACCOUNT SET Education='{'

WHERE A\_C\_No={}".format(EQ,a\_c)

cursor.execute(str1)

mycon.commit()

elif ch==3:

print(" New Occupation")

print()

print(" 1. Student\n","2. Housewife\n","3. Central  
Government\n","4. State Government\n","5. PSUs\n",  
"6. Private Companies\n","7. Others")

print()

while True:

ch4=int(input(" (1/2/3/4/5/6/7): "))

print()

if ch4==1:

Occ="Student"

break

elif ch4==2:

Occ="Housewife"

break

elif ch4==3:

Occ="Central Government"

break

elif ch4==4:

Occ="State Government"

break

elif ch4==5:

Occ="PSUs"

break

elif ch4==6:

Occ="Private Companies"

break

```

elif ch4==7:
    Occ="Others"
    break
else:
    print("Please Enter valid Choice!")
    print()
    continue
str1="UPDATE ACCOUNT SET Occupation='{}'
WHERE A_C_No={}".format(Occ,a_c)
cursor.execute(str1)
mycon.commit()
elif ch==4:
    print(" New Income(in Rs.)")
    print()
    print(" 1. 0-100000\n","2. 100000-500000\n","3.
Above 5 Lakhs")
    print()
    while True:
        ch5=int(input(" (1/2/3): "))
        print()
        if ch5==1:
            inc="0-100000"
            break
        elif ch5==2:
            inc="100000-500000"
            break
        elif ch5==3:
            inc="Above 5 Lakhs"
            break
        else:
            print("Please Enter valid Choice!")
            print()
            continue

str1="UPDATE ACCOUNT SET Income='{}' WHERE
A_C_No={}".format(inc,a_c)
cursor.execute(str1)
mycon.commit()
elif ch==5:
    add=input(" Enter New Address: ")
break

```

```

print()
        str1="UPDATE ACCOUNT SET address='{}' WHERE
A_C_No={} ".format(add,a_c)
        cursor.execute(str1)
        mycon.commit()
    elif ch==6:
        Email=input(" Enter New Email-ID: ")
        print()
        str1="UPDATE ACCOUNT SET email_id='{}' WHERE
A_C_No={} ".format(Email,a_c)
        cursor.execute(str1)
        mycon.commit()

    if a==0:
        print(" A/C Not Found")
        print()
        break
    elif a==1:

        print()
        print("  Account Modified Succesfully!")
        print()
        break

```

```

def view():
    print(" ***** A/C Details
*****")

    print()
    cursor.execute("select * from account")
    data=cursor.fetchall()

```

```

L2=["Customer ID","Account
Number","Name","Balance","Age","Father's Name","Mother's
Name","Gender","Mobile Number",
    "Address","Type of Account","Educational
Qualification","Occupation","Income","Email ID"]

```

while True:

    a\_c=int(input(" Enter A/C number: "))

    print()

    a=0

    for x in data:

        if x[1]==a\_c:

            print(" ",L2[0]," : ",x[0])

            print()

            print(" ",L2[1]," : ",x[1])

            print()

            print(" ",L2[2]," : ",x[2])

            print()

            print(" ",L2[3]," : ",x[3])

            print()

            print(" ",L2[4]," : ",x[4])

            print()

            print(" ",L2[5]," : ",x[5])

            print()

            print(" ",L2[6]," : ",x[6])

            print()

            print(" ",L2[7]," : ",x[7])

            print()

            print(" ",L2[8]," : ",x[8])

            print()

            print(" ",L2[9]," : ",x[9])

            print()

            print(" ",L2[10]," : ",x[10])

            print()

            print(" ",L2[11]," : ",x[11])

            print()

            print(" ",L2[12]," : ",x[12])

            print()

            print(" ",L2[13]," : ",x[13])

            print()

            print(" ",L2[14]," : ",x[14])

            print()

        a=1

if a==0:

    print(" A/C Not Found")

    break

```

elif a==1:
    break
def closee():
    print(" ***** A/C Closing
*****")

    print()
    cursor.execute("select * from account")
    data=cursor.fetchall()
    l=[]
    Ldata=[] #new list containing every record as list
    for x in data:
        l=list(x)
        Ldata.append(l)

while True:

    a_c=int(input(" Enter A/C Number: "))
    print()
    a=0
    print()
    for x in Ldata:
        if x[1]==a_c:
            a=1
            x[3]=int(x[3])
            if x[3]!=0:
                print("  Alert!!!")
                print()
                print("  You have Rs.",x[3],"in Your Account")
                ch0=input(" Do You Still Want To Close Your account
(Y-Yes/ N-No): ")
                if ch0.lower()=='y':
                    str1="DELETE FROM ACCOUNT WHERE
A_C_No={}".format(a_c)
                    cursor.execute(str1)
                    mycon.commit()
                    a=2
                    break
                elif ch0.lower()=='n':
                    break

```

```
elif x[3]==0:
```

```
    str1="DELETE FROM ACCOUNT WHERE
```

```
A_C_No={}".format(a_c)
```

```
    cursor.execute(str1)
```

```
    mycon.commit()
```

```
    a=2
```

```
if a==0:
```

```
    print(" A/C Not Found")
```

```
    print()
```

```
    print(" Enter correct A/C Number")
```

```
    print()
```

```
    continue
```

```
elif a==1:
```

```
    print(" Account not closed")
```

```
    ch1=input(" Do You Wish to Close an A/C (Y/N): ")
```

```
    if ch1.lower()=='y':
```

```
        continue
```

```
    else:
```

```
        break
```

```
elif a==2:
```

```
    print()
```

```
    print("  Account Closed!")
```

```
    print()
```

```
    break
```

```
def Bank():
```

```
    print(" ***** All Existing A/C Details  
*****")
```

```
    print()
```

```
    cursor.execute("select * from account")
```

```
    data=cursor.fetchall()
```

```
L2=["Customer ID","Account
```

Number","Name","Balance","Age","Father's  
Name","Mother's Name","Gender","Mobile Number",  
"Address","Type of Account","Educational  
Qualification","Occupation","Income","Email ID"]

count=1

for x in data:

print("-----",count,"-----")

print()

print(" ",L2[0]," : ",x[0])

print()

print(" ",L2[1]," : ",x[1])

print()

print(" ",L2[2]," : ",x[2])

print()

print(" ",L2[3]," : ",x[3])

print()

print(" ",L2[4]," : ",x[4])

print()

print(" ",L2[5]," : ",x[5])

print()

print(" ",L2[6]," : ",x[6])

print()

print(" ",L2[7]," : ",x[7])

print()

print(" ",L2[8]," : ",x[8])

print()

print(" ",L2[9]," : ",x[9])

print()

print(" ",L2[10]," : ",x[10])

print()

print(" ",L2[11]," : ",x[11])

print()

print(" ",L2[12]," : ",x[12])

print()

print(" ",L2[13]," : ",x[13])

print()

print(" ",L2[14]," : ",x[14])

print()

count+=1

print("\_\_\_\_\_")



```
_____)
print("-----")
```

```
print("_____)
_____)
print()
```

```
'''
```

```
" 1. Create an account\n","2. View Your A/C Details\n","3.
A/C enquiry\n","4. Deposit amount\n",
    "5. Withdraw amount\n","6. Modify an account\n","7.
Close an Account\n",
    "8. View All A/C Details(Only for Bank)\n","9. Exit")'''
```

```
while True:
```

```
    mainmenu()
```

```
    ch=int(input(" Enter Your Choice (1-9) :"))
```

```
    print()
```

```
    if ch==1:
```

```
        create()
```

```
        print()
```

```
        ch1=input(" Do You Wish to Continue(Y/N): ")
```

```
        print()
```

```
        if ch1.lower()=='y':
```

```
            continue
```

```
        else:
```

```
            break
```

```
    elif ch==2:
```

```
        view()
```

```
        print()
```

```
        print()
```

```
        ch2=input(" Do You Wish to Continue(Y/N): ")
```

```
        print()
```

```
        if ch2.lower()=='y':
```

```
            continue
```

```
        else:
```

```
            break
```

```
    elif ch==3:
```

```
        print(" 1. Balance Enquiry\n","2. Transaction Details\n")
```

```
        ch3=int(input(" Choose from above options(1-2): "))
```

```
        print()
```

```
        if ch3==1:
```

```
Benquiry()
    print()

elif ch3==2:
    Tenquiry()
    print()
ch4=input(" Do You Wish to Continue(Y/N): ")
print()
if ch4.lower()=='y':

    continue

else:
    break

elif ch==4:
    Deposit()
    print()
    print()
ch5=input(" Do You Wish to Continue(Y/N): ")
print()
if ch5.lower()=='y':
    continue
else:
    break
elif ch==5:
    withdraw()
    print()
    print()
ch6=input(" Do You Wish to Continue(Y/N): ")
print()
if ch6.lower()=='y':
    continue
else:
    break
elif ch==6:
    modify()

    print()
ch7=input(" Do You Wish to Continue(Y/N): ")
print()
if ch7.lower()=='y':
    continue
```

```
else:
    break
elif ch==7:
    closee()
    print()
    print()
    ch8=input(" Do You Wish to Continue(Y/N): ")
    print()
    if ch8.lower()=='y':
        continue
    else:
        break
elif ch==8:
    password='Bank123'
    while True:
        passw=input(" Enter password:")
        print()
        if passw==password:
            Bank()
            print()
            print()
            break
        else:
            print(" Invalid Password")
            print()
            ch9=input(" Do You Wish to Enter Again(Y/N): ")
            print()
            if ch9.lower()=='y':
                continue
            else:
                break
    ch10=input(" Do You Wish to Continue(Y/N): ")
    print()
    if ch10.lower()=='y':
        continue
    else:
        break

elif ch==9:
    break
```

# OUTPUT SCREENS

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:\python programmes\project.py =====

*****  BANK MANAGEMENT SYSTEM  *****

Welcome !!!

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :1

*****  Account Creation  *****

Please fill the details carefully

Enter First Name: Ayush
Enter Middle Name(Optional,Press Enter if N/A ):
Enter Last Name: Sharma
Enter Age: 19
Gender(M/F): M

Ln: 573 Col: 4
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

Enter Father's Name: Praveen Kumar
Enter Mother's Name: Kamla Sharma
Enter mobile number: 9650640621
Enter Residential Address: New Delhi

Choose Type of Account

1. Saving
2. Term Deposit
3. Current

(1/2/3): 1

Enter any one of these ID proofs

1.Aadhar No.
2.Passport No.
3.Driving License No.
4.Election Card No.
5.NREGA Card No.

(1/2/3/4/5): 1

Enter Aadhar No: 1235798210

Educational Qualification

1. Illiterate
2. Metric
3. Intermediate
4. Graduate
5. Post Graduate
6. Profession(CA/MBA/Engineer)

(1/2/3/4/5/6): 3

Occupation

Ln: 563 Col: 4
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

1. Student
2. Housewife
3. Central Government
4. State Government
5. PSUs
6. Private Companies
7. Others

(1/2/3/4/5/6/7): 1

Income(in Rs.)

1. 0-100000
2. 100000-500000
3. Above 5 Lakhs

(1/2/3): 1

Enter Email Id: Ayush23@gmail.com

~~~~~ YOUR ACCOUNT HAS BEEN SUCCESSFULLY CREATED ~~~~~

YOUR CUSTOMER ID : CQNF29430175

YOUR ACCOUNT NUMBER: 3313838469832131

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :2

***** A/C Details *****

Enter A/C number: 3313838469832131

Customer ID : CQNF29430175

Account Number : 3313838469832131

Name : Ayush Sharma

Balance : 0

Age : 19

Father's Name : M

Mother's Name : Praveen Kumar

Gender : Kamla Sharma

Mobile Number : 9650640621

Address : New Delhi

Type of Account : Saving

Educational Qualification : Intermediate

Occupation : Student

Income : 0-100000

Email ID : Ayush23@gmail.com
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :4

***** Deposit *****

Enter A/C number: 3313838469832131

Enter Your Name: Ayush

Enter Amount To Be Deposited: 20000

Amount Deposited

Your Balance is: 20000

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Ln: 563 Col: 4
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :5

***** Withdraw *****

Enter A/C number: 3313838469832131

Enter Your Name: Ayush

Enter Amount To Be Withdrawn: 500

Amount Withdrawn

Your Balance is: 19500

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :3

Ln: 563 Col: 4
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

1. Balance Enquiry
2. Transaction Details

Choose from above options(1-2): 1

***** Balance *****

Enter A/C number: 3313838469832131

Your Balance is: 19500

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :3

1. Balance Enquiry
2. Transaction Details

Choose from above options(1-2): 2

***** Transaction Details *****

Enter A/C number: 3313838469832131

Ln: 563 Col: 4
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

-----Transaction details-----

A/C Number: 3313838469832131

+-----+-----+
| Amount Deposited | On |
+-----+-----+
| 20000 | 2021-11-11 |
+-----+-----+

+-----+-----+
| Amount Withdrawn | On |
+-----+-----+
| 500 | 2021-11-11 |
+-----+-----+

Your Balance is : 19500

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :7

***** A/C Closing *****

Ln: 563 Col: 4
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Enter A/C Number: 3313838469832131

Alert!!!

You have Rs. 19500 in Your Account
Do You Still Want To Close Your account (Y-Yes/ N-No): y

Account Closed!

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :6

***** A/C Modification *****

Enter A/C Number: 1939866923110195

Modify

1. Mobile Number
2. Educational Qualification
3. Occupation
4. Income
5. Address
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
6. Email ID
Enter Choice to be Modified:(1-6) 1

Enter New 10-digit Mobile Number: 9717447514

Account Modified Succesfully!

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :8

Enter password:pass124

Invalid Password

Do You Wish to Enter Again(Y/N): y

Enter password:Bank123

***** All Existing A/C Details *****

----- 1 -----

Customer ID : KPSA40429602
```



```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

Account Number : 1939866923110195

Name : Naveen Vats

Balance : 31200

Age : 22

Father's Name : M

Mother's Name : Praveen Vats

Gender : Kumari Yatika

Mobile Number : 9717447514

Address : qwerty

Type of Account : Term Deposit

Educational Qualification : Graduate

Occupation : State Government

Income : 100000-500000

Email ID :

----- 2 -----

Customer ID : EYJ012721228

Account Number : 8714914572546413

Name : Eklavya Kumar

Balance : 19244

Ln: 563 Col: 4
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

Age : 17

Father's Name : M

Mother's Name : Pranav

Gender : Roseline

Mobile Number : 9814545433

Address : asdfghj

Type of Account : Saving

Educational Qualification : Metric

Occupation : Student

Income : 0-100000

Email ID : uyiu@gmail.com

----- 3 -----

Customer ID : DQPA51006227

Account Number : 713025033002081

Name : Akansha Yadav

Balance : 0

Age : 14

Father's Name : F

Ln: 563 Col: 4
```

```

IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

Mother's Name : Sushil Yadav

Gender : Kamla Yadav

Mobile Number : 9818447515

Address : New Delhi

Type of Account : Current

Educational Qualification : Metric

Occupation : Student

Income : 0-100000

Email ID : Akansha@gmail.com

=====

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Ln: 563 Col: 4
Type here to search
22:02 11-11-2021
```

```

IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help

Gender : Kamla Yadav

Mobile Number : 9818447515

Address : New Delhi

Type of Account : Current

Educational Qualification : Metric

Occupation : Student

Income : 0-100000

Email ID : Akansha@gmail.com

=====

Do You Wish to Continue(Y/N): y

Main Menu

1. Create an account
2. View Your A/C Details
3. A/C enquiry
4. Deposit amount
5. Withdraw amount
6. Modify an account
7. Close an Account
8. View All A/C Details(Only for Bank)
9. Exit

Enter Your Choice (1-9) :9

>>>

Ln: 563 Col: 4
Type here to search
22:02 11-11-2021
```

# BIBLIOGRAPHY

- [docs.python.org](https://docs.python.org)
- [geeksforgeeks.org](https://www.geeksforgeeks.org)
- [stackoverflow.com](https://stackoverflow.com)