BANK MANAGEMENT SYSTEM

MARCUS BANK

DONE BY:

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ACKNOWLEDGEMENT

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INDEX

INTRODUCTION

A bank is a commercial or state institution that provides financial services, including issuing money, banknotes or debit cards, receiving deposits of money, lending money and processing transactions. A commercial bank is usually defined as an institution that provides selected banking services without meeting the legal definition of a bank. Banks have a long history and have influenced economy and politics for centuries. Banking services have expanded to include services directed at individuals and risks in these much smaller transactions are pooled.

In today's world, the way of functioning and managing the system has been totally changed. There is a sudden change in the structure, maintenance and modification, handling, leveling inside every system. Without managing system through computer applications and programming, the development of infrastructures are unfinished. There are many errors and drawbacks without use of computer programming and applications.

As we know that in today's challenging world, every system is developed and launched by the use of computer software and programming.

OVERVIEW

The project that we have undertaken aims to develop a banking system that is clean, user – friendly and multi-functional. The project "Markus Bank 2.0" includes the following functionalities:

1. Transaction can be done with minimum user events.
2. All transactional details and accounts are stored in flies on stable storage.
3. Customer can view their own account details and can use them as necessary.
4. All customers data are stored in files on a stable storage.
5. Accounts have to pass through a login system to enter their accounts.
6. This system possesses password protected administrative access; thus, preventing the whole management system from unauthorized access.

HEADER FILES

1. # include <iostream>
2. # include <fstream>
3. # include <conio.h>
4. # include <string.h>
5. # include <cstdlib>

FUNCTIONS INCLUDED

1. Void write_account()
2. Void modify_account()
3. Void deposit_withdrawal()
4. Void delete_account()
5. Void display_all()
6. Void searchacc()
7. Void searchname()
8. Void searchbal()

SOURCE CODE

```cpp
class account
{
        int acno;
        char name[50];
        char pw [10];
        int bal;
        int phno;
        char type,status;
public:
        void create_account()
        { acno=rand()%100;
                cout<<"\nAccount Number :"<< acno;
            cout<<"\n\nEnter The Name of The account Holder : ";
            cin.ignore();
            cin.getline(name,50);
            cout << "\nEnter Password : ";
            cin.ignore();
            cin.getline(pw,10);
            cout <<"\nEnter Phone Number : ";
            cin >> phno;
            cout<<"\nEnter The Initial amount(>=500) : ";
        cin >> bal;

        if ( bal < 500 )
        {
                cout << "\nYou need to deposit more money.\n";
                cout << "Enter Balance : ";
```

```cpp
                    cin >> bal;

                    }

            cout<<endl<<endl;

            status='a';


}

            void dele()

 {

    status='d';

 }

void show_account()

{   cout<<endl;


        cout<<"  "<<acno;

  cout<<"       "<<name;

  cout<<"           "<<bal;

  cout<<"         "<<phno<<endl<<endl;


}



void setdata(int ch)

            {

                    switch(ch)

                    {

                            case 1: cin.ignore();

                                    cout<<"Enter New Name : ";

                                    cin.getline(name,25);
```

```cpp
                                break;
            case 2:       cout<<"Enter New Password : ";
                                cin>>pw;
                                break;
            case 3:       cout<<"Enter New Balance :";
                                cin>>bal;
                                break;
            case 4: cout<<"Enter New Phone Number :";
                                cin>>phno;
                                break;
            case 5:cin.ignore();
                                cout<<"Enter New Name : ";
                                cin.getline(name,25);
                cout<<"Enter New Password : ";
                                cin>>pw;
                cout<<"Enter New Balance :";
                                cin>>bal;
                cout<<"Enter New Phone Number :";
                                cin>>phno;

                                break;
                           default: cout<<"Incorrect Option. Please Try
Again\n\n\n"  ;
                                system("pause");
        }
            }
     void deposit(int x)
     {
```

```cpp
                bal += x;

        }
        void withdraw(int x)
        {
                bal-=x;
        }

        int retacno()
        {
                return acno;
        }
        char* retname()
        {
                return name;
        }
        int retbalance()
        {
                return bal;
        }
        char retstat()
                {
                        return status;
                }

};
```

```cpp
void write_account()
{
        start:
        system("cls");

        char ch;

        ofstream outfile;
        outfile.open("e:\\data\\account.dat",ios::binary|ios::app);
        account obj;
        obj.create_account();
        outfile.write((char*)&obj,sizeof(obj));
        outfile.close();
        cout<<endl<<endl;
        cout<<"Account Added.\nDo You Want To Add Another Account(y/n):";
        cin>>ch;

        if(ch=='y')
        {
                goto start;
        }
}
void modify_account()
{
        start:
        system("cls");

        fstream file;
```

```cpp
	file.open("e:\\data\\account.dat",ios::in|ios::out);
account obj;


		cout<<"Enter Account no. : ";
int n,ch;
cin>>n;


		while(file.read((char*)&obj,sizeof(obj)))
{
  if(obj.retacno()==n)
   {
			if(obj.retstat()=='a')
      {
	cout<<"============================================================\n";
	cout<<"Acc no.    NAME         Balance    PhoneNumber";
	cout<<"\n==================================================================\n";			obj.show_account();

		cout<<"\nChoose what to modify\n\n1. Name\n2. Password\n3. Balance \n4. Phone number\n5. Update All\n";
		cin>>ch;
		obj.setdata(ch);


		int pos=-1*sizeof(obj);
		file.seekp(pos,ios::cur);
		file.write((char*)&obj,sizeof(obj));
      }
				}
}
```

```cpp
                file.close();
                cout<<endl<<endl;


                cout<<"Account modified.\nDo You Want To modify Another
Account(y/n):";
                cin>>ch;


                if(ch=='y')
                {
                        goto start;
                }
        }
void deposit_withdraw(int option)
{
                start:
                system("cls");


                fstream file;
        file.open("e:\\data\\account.dat",ios::in|ios::out);
        account obj;


                cout<<"Enter Account no. : ";
        int n,ch,amt;
        cin>>n;


                while(file.read((char*)&obj,sizeof(obj)))
        {
          if(obj.retacno()==n)
           {
```

```cpp
                    if(obj.retstat()=='a')
        {
    cout<<"=====================================================
======\n";
    cout<<"Acc no.     NAME           Balance     PhoneNumber";
    cout<<"\n=====================================================
=========\n";                  obj.show_account();
          if(option==1)
          {
       cout<<"\n\n\tTO DEPOSITE AMOUNT ";
                    cout<<"\n\nEnter The amount to be deposited:  ";
                    cin>>amt;
                    obj.deposit(amt);
                              }
                              if (option==2)
        {     cout<<"\n\n\tTO WITHDRAW AMOUNT ";
                    cout<<"\n\nEnter The amount to be withdraw:  ";
                    cin>>amt;
                    int bal=obj.retbalance()-amt;
                    if(bal<500 )
                          cout<<endl<<"Insufficience balance"<<endl;
                    else
                          obj.withdraw(amt);


                              }

          int pos=-1*sizeof(obj);
          file.seekp(pos,ios::cur);
          file.write((char*)&obj,sizeof(obj));
```

```cpp
                    }
                }
        }

                file.close();

        }


void delete_account()
    { start:
                    system("cls");

                fstream file;

        file.open("e:\\data\\account.dat",ios::in|ios::out);
        account obj;

                    cout<<"Enter account no. : ";
        int n;
        char ch;
        cin>>n;

                    while(file.read((char*)&obj,sizeof(obj)))
        {
            if(obj.retacno()==n)
            {
                                obj.show_account();
```

15

```cpp
                cout<<"Are you sure you want to Remove this account(y/n)";
                cin>>ch;


                                    if(ch=='y')
                {
                    obj.dele();
                }


                                    int pos=-1*sizeof(obj);
                file.seekp(pos,ios::cur);
                file.write((char*)&obj,sizeof(obj));
            }
        }


                    file.close();
                    cout<<endl<<endl;


                    cout<<"Account deleted.\nDo You Want To Remove Another
    Account(y/n):";

                    cin>>ch;


                    if(ch=='y')
                    {
                            goto start;
                    }
                }
    void display_all()
    {
        system("cls");
```

```cpp
        ifstream inFile;

        inFile.open("e:\\data\\account.dat",ios::binary);

        account obj;

        if(!inFile)

        {

                cout<<"File could not be open !! Press any Key...";

                return;

        }


                cout<<"\n\n\t\tACCOUNT HOLDER LIST\n\n";

        cout<<"=====================================================
=======\n";

        cout<<"Acc no.    NAME          Balance     PhoneNumber";

        cout<<"\n=================================================
=========\n";


                while(inFile.read((char*)&obj,sizeof(obj)))

                {

                        if(obj.retstat()=='a')

                        {

                                obj.show_account();

                        }

                }


                inFile.close();

        }


void searchacc()
```

```cpp
{
        start:
        system("cls");


        ifstream infile;
        infile.open("e:\\data\\account.dat",ios::binary);
                cout<<"\nBALANCE DETAILS\n";
        int n;
        char ch;


        account obj;
        cout<<"Enter Account no. :";
        cin>>n;


        while(infile.read((char*)&obj,sizeof(obj)))
        {
                if (obj.retacno()==n)
                {
                        if(obj.retstat()=='a')
                        {
    cout<<"============================================================\n";
    cout<<"Acc no.    NAME          Balance     PhoneNumber";
    cout<<"\n==============================================================\n";

                                                obj.show_account();
                        }


        }}
```

```cpp
                    infile.close();

                    cout<<endl<<endl;


                    cout<<"\nDo You Want To Search Another Enquiry(y/n):";

                    cin>>ch;


                    if(ch=='y')

                    {

                            goto start;

                    }

        }


        void searchname()

        {

                    start:

                    system("cls");


                    ifstream infile;

                    infile.open("e:\\data\\account.dat",ios::binary);

                            cout<<"\nBALANCE DETAILS\n";

                    string n;

                    char ch;


                    account obj;


                    cout<<"Enter Name :";

                    cin>>n;
```

```cpp
            while(infile.read((char*)&obj,sizeof(obj)))
            {
                    if (obj.retname()==n)
                    {
                            if(obj.retstat()=='a')
                            {
    cout<<"===========================================================\n";
    cout<<"Acc no.      NAME          Balance      PhoneNumber";
    cout<<"\n=============================================================\n";
                                          obj.show_account();
                            }
                    }
            }

            infile.close();
            cout<<endl<<endl;
            cout<<"\nDo You Want To Search Another Enquiry(y/n):";
            cin>>ch;

            if(ch=='y')
            {
                    goto start;
            }
    }
            void searchbal()
    {
```

```
                    start:

                    system("cls");


                    ifstream infile;

                    infile.open("e:\\data\\account.dat",ios::binary);


                    int n,ch;


                    account obj;


                    cout<<"Enter Balance :";

                    cin>>n;

                    cout<<"1. Above\n2.Below";

                    cin>>ch;




     cout<<"==============================================================
======\n";

     cout<<"Acc no.    NAME          Balance       PhoneNumber";

     cout<<"\n==============================================================
=========\n";

                    if (ch==1)

            {

                    while(infile.read((char*)&obj,sizeof(obj)))

                    {

                            if (obj.retbalance()>n)
```

```cpp
                    {
                            if(obj.retstat()=='a')
                            {
                                    obj.show_account();
                            }
                    }
            }
    }

    else
    {
    while(infile.read((char*)&obj,sizeof(obj)))
    {
            if (obj.retbalance()<n)
            {
                     if(obj.retstat()=='a')
                    {

                            obj.show_account();
                    }
            }
    }
    }

    infile.close();
    cout<<endl<<endl;
    cout<<"\nDo You Want To Search Another Enquiry(y/n):";
    cin>>ch;
```

```cpp
              if(ch=='y')
              {
                      goto start;
              }
       }


int menu()
{ int n=0;
       char ch;
       int num;
do{

       system("cls");

              cout<<"\n\n\n\tMAIN MENU";
              cout<<"\n\n\t01. NEW ACCOUNT";
              cout<<"\n\n\t02. DEPOSIT AMOUNT";
              cout<<"\n\n\t03. WITHDRAW AMOUNT";
              cout<<"\n\n\t04. BALANCE ENQUIRY";
              cout<<"\n\n\t05. ALL ACCOUNT HOLDER LIST";
              cout<<"\n\n\t06. DELETE AN ACCOUNT";
              cout<<"\n\n\t07. MODIFY AN ACCOUNT";
              cout<<"\n\n\t08. EXIT";
              cout<<"\n\n\tSelect :  ";
              cin>>ch;
              system("cls");
              switch(ch)
```

```cpp
			{
			case '1':
					write_account();
					break;
			case '2':
					deposit_withdraw(1);
					break;
			case '3':
					deposit_withdraw(2);
					break;
			case '4':
			system("cls");
							int ch;
							cout<<"Choose what to search by:\n1. ID no.\n2.
Name\n3. Balance\n";
							cin>>ch;
							switch(ch)
							{
									case 1:
											system("cls");
											searchacc();
											break;
									case 2:
											system("cls");
											searchname();
											break;
									case 3:
											system("cls");
											searchbal();
```

```cpp
                                                break;
                                default :
                                        cout<<"\nInvalid option try again";
                                }
                                break;
                case '5':
                        display_all();
                        break;
                case '6':
                        delete_account();
                        break;
                case '7':
                        modify_account();
                        break;
                case '8':
                        cout<<"\n\n\tThanks for using MARCUS BANK
"<<endl<<endl<<endl;
                        break;
                default :cout<<"\a";
                }
        }
                while (ch<8);
}
main ()
{
        int I;
                        system("color 3f");

        int ch=0;
```

```cpp
    cout << "\n\n\n\n\t\t\t\tMARCUS BANK     2.0\n\n\n\t\t\t\tBy: KRUPAAVANI
AND VANDANA";

    cout<<endl<<endl<<endl;

getch();

    do{

    system("cls");

cout<<"\n\n\n\tMAIN MENU";

        cout<<"\n\n\t01. ADMIN";

        cout<<"\n\n\t02. USER";

        cout<<"\n\n\t03. EXIT";

        cout<<"\n\n\tEnter your choice : ";cin>>l;

        if ( l == 1 )

        {       display_all();

        }

        if ( l == 2 )

        {       menu();

        }

        else if ( l == 3 )

        {

                system("cls");

                cout<<"\n\n\n\tTHANK YOU FOR USING MARCUS BANK
!!"<<endl<<endl;

        }

        cout<<endl<<"do you wish to continue? (yes=1 and no=2)";

        cin>>ch;

    }while(ch==1);


    return 0;    }
```
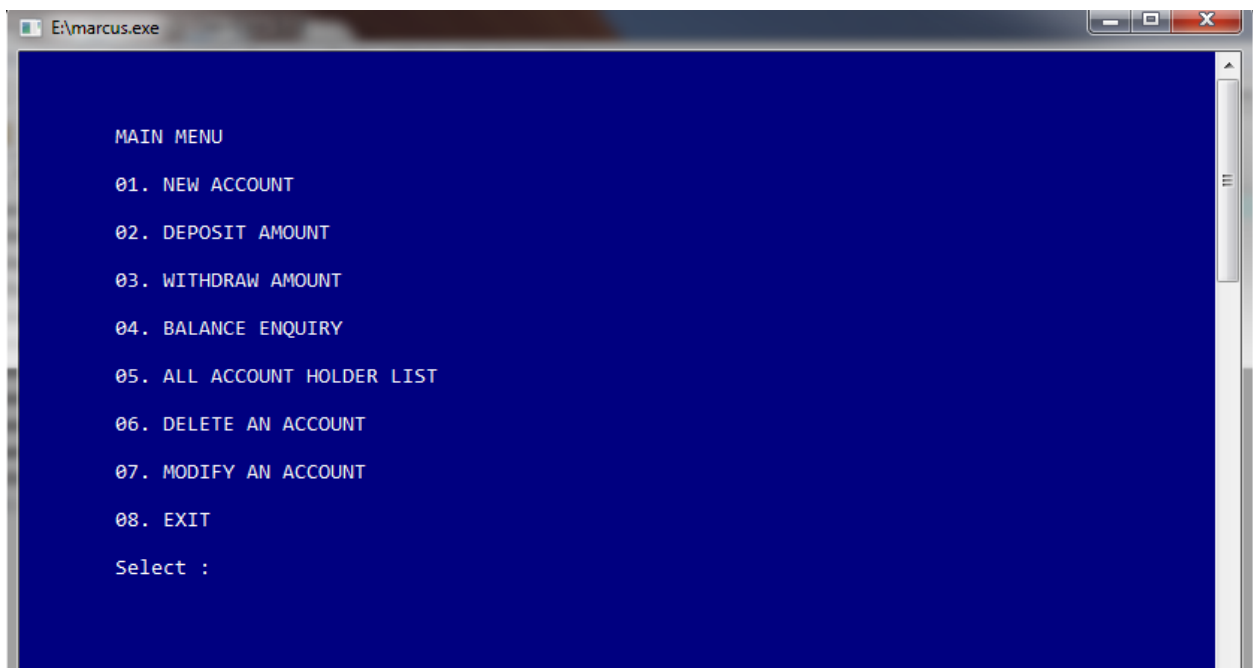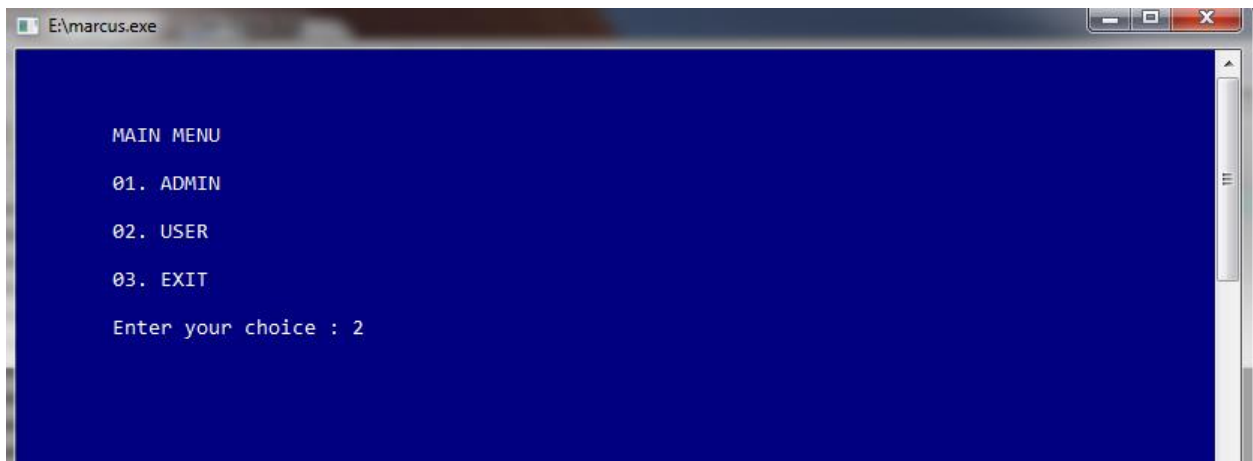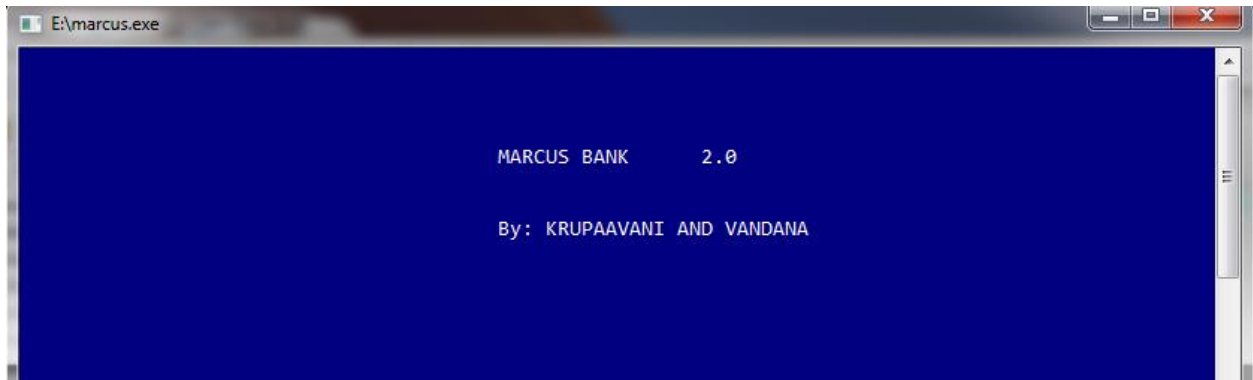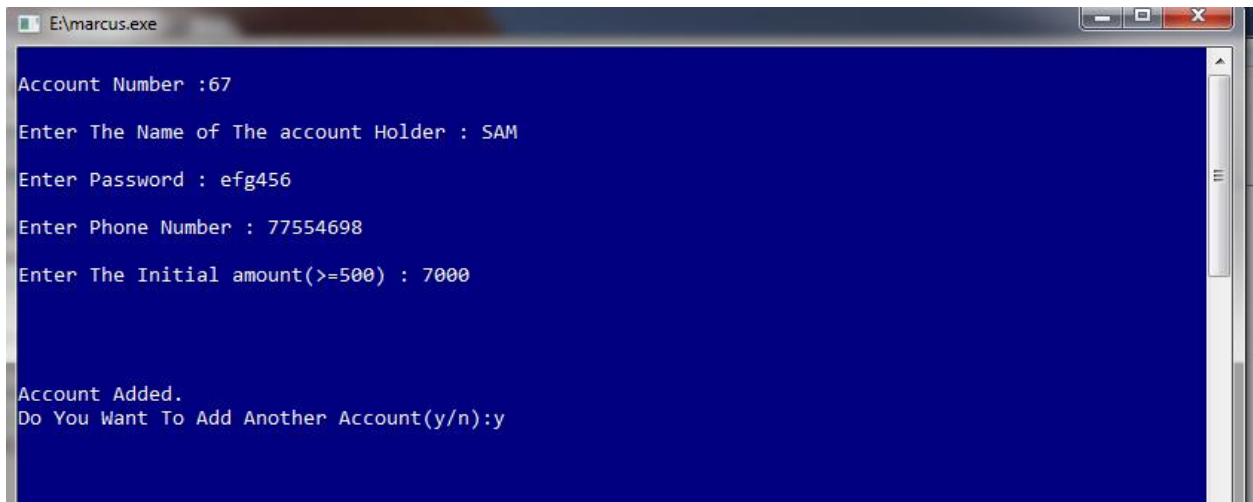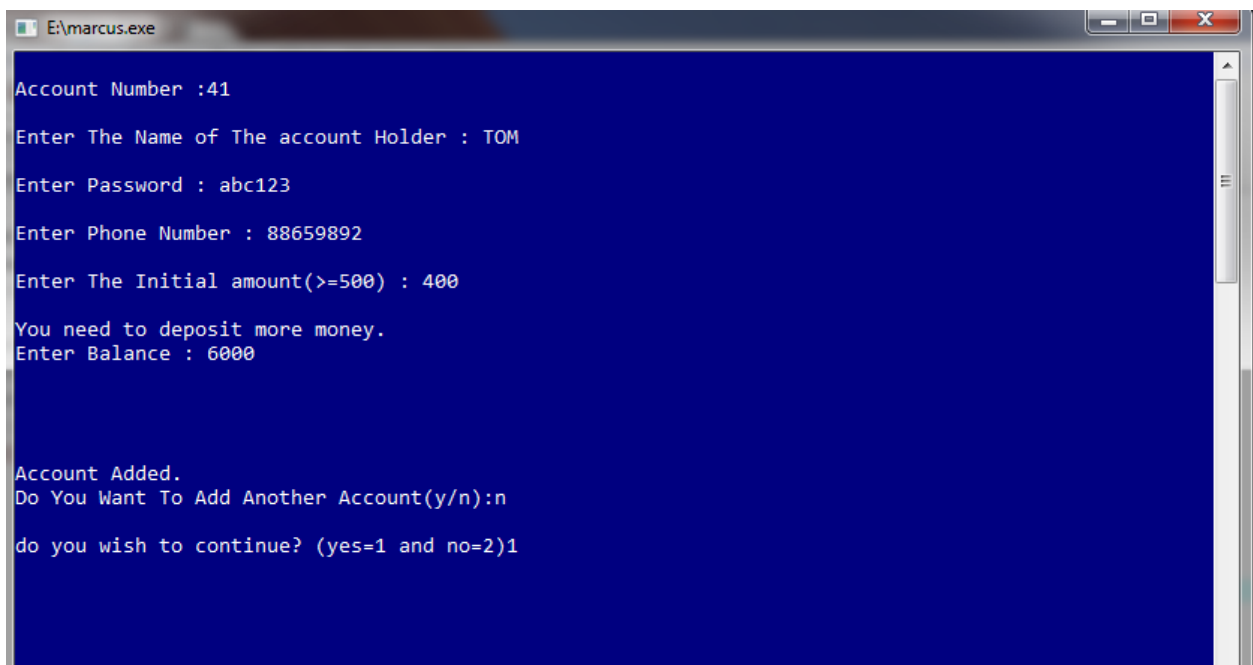
OUTPUT


```
MARCUS BANK    2.0


By: KRUPAAVANI AND VANDANA
```



```
MAIN MENU

01. ADMIN

02. USER

03. EXIT

Enter your choice : 2
```



```
MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. DELETE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select :
```

1. NEW ACCOUNT
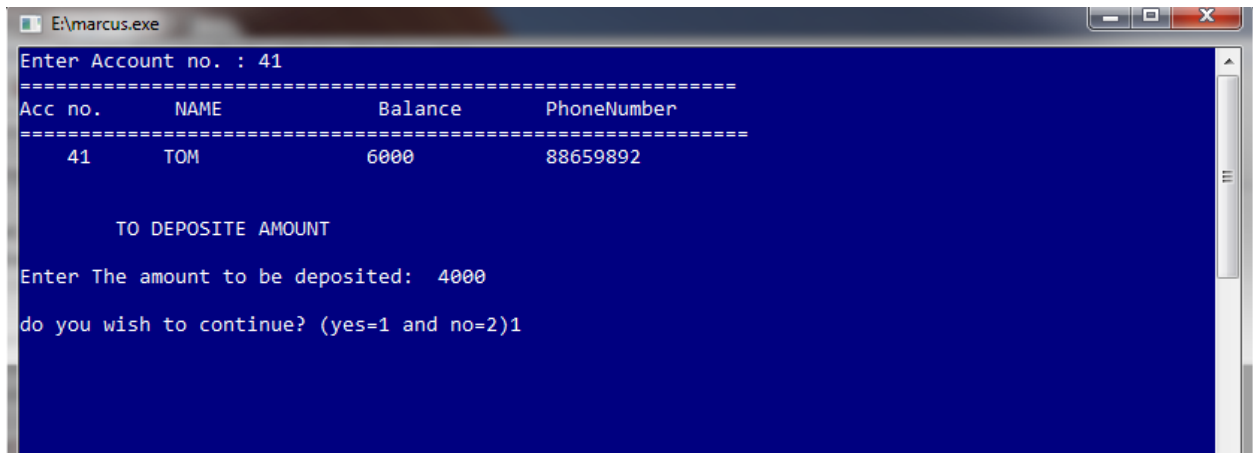
2. DEPOSIT AMOUNT

```
E:\marcus.exe

Enter Account no. : 41
===============================================================
Acc no.        NAME            Balance        PhoneNumber
===============================================================
   41        TOM              6000           88659892


        TO DEPOSITE AMOUNT

Enter The amount to be deposited:  4000

do you wish to continue? (yes=1 and no=2)1
```

3. WITHDRAW AMOUNT

```
E:\marcus.exe

Enter Account no. : 41
===============================================================
Acc no.        NAME            Balance        PhoneNumber
===============================================================
   41        TOM              10000          88659892


        TO WITHDRAW AMOUNT

Enter The amount to be withdraw:  6000

do you wish to continue? (yes=1 and no=2)1
```

4. BALANCE ENQUIRY

```
E:\marcus.exe
Choose what to search by:
1. ID no.
2. Name
3. Balance
```

```
E:\marcus.exe

BALANCE DETAILS
Enter Account no. :41
=========================================================
Acc no.      NAME            Balance      PhoneNumber
=========================================================
   41        TOM             4000         88659892


Do You Want To Search Another Enquiry(y/n):
```

```
E:\marcus.exe

BALANCE DETAILS
Enter Name :SAM
=========================================================
Acc no.      NAME            Balance      PhoneNumber
=========================================================
   67        SAM             7000         77554698


Do You Want To Search Another Enquiry(y/n):
```
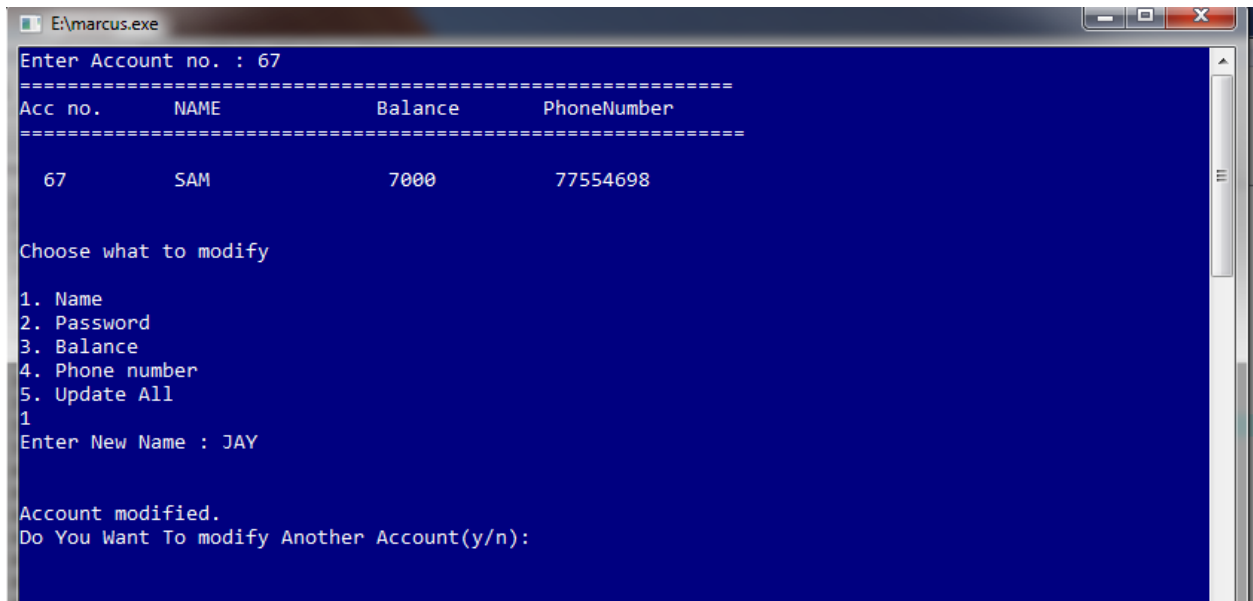
6.DELETE AN ACCOUNT

```
E:\marcus.exe
Enter account no. : 41

ACCOUNT NUMBER:41
NAME          :TOM
BALANCE       :4000
PHONE NUMBER  :88659892


Are you sure you want to Remove this account(y/n)y


Account deleted.
Do You Want To Remove Another Account(y/n):n
```

7. MODIFY AN ACCOUNT
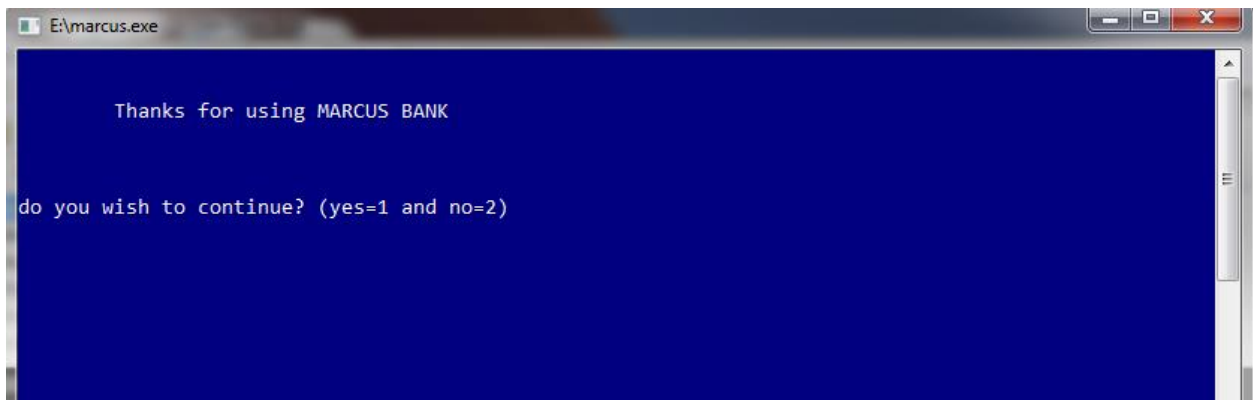
```
E:\marcus.exe
Enter Account no. : 67
==============================================================
Acc no.        NAME            Balance         PhoneNumber
==============================================================

  67           SAM             7000            77554698


Choose what to modify

1. Name
2. Password
3. Balance
4. Phone number
5. Update All
1
Enter New Name : JAY


Account modified.
Do You Want To modify Another Account(y/n):
```

8.EXIT

```
E:\marcus.exe

        Thanks for using MARCUS BANK


do you wish to continue? (yes=1 and no=2)
```

```
E:\marcus.exe

        MAIN MENU

        01. ADMIN

        02. USER

        03. EXIT

        Enter your choice : 1
```



```
E:\marcus.exe

                ACCOUNT HOLDER LIST

===========================================================
Acc no.        NAME            Balance        PhoneNumber
===========================================================

 67            JAY             7000            77554698

do you wish to continue? (yes=1 and no=2)
```



```
E:\marcus.exe


        MAIN MENU

        01. ADMIN

        02. USER

        03. EXIT

        Enter your choice : 3
```



```
E:\marcus.exe


        THANK YOU FOR USING MARCUS BANK !!

do you wish to continue? (yes=1 and no=2)2
```