COMPUTER SCIENCE INVESTIGATORY PROJECT

TOPIC: BANKING SYSTEM

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BONAFIDE CERTIFICATE

Certified to be the bonafide record of the project work done by
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School

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"There are times when silence speaks so much more loudly than words of praise to only as good as belittle a person, whose words do not express, but only put a veneer over true feelings, which are of gratitude at this point of time."

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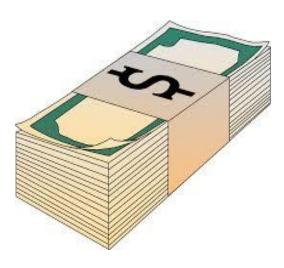
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WHAT IS C++ ???

C++ is an object oriented programming (OOP) language, developed by Bjarne Stroustrup, and is an extension of C language. C++ is one of the most popular languages primarily utilized with system/application software, drivers, client-server applications and embedded firmware.

The main highlight of C++ is a collection of pre-defined classes, which are data types that can be instantiated multiple times. The language also facilitates declaration of user defined classes. Classes can further accommodate member functions to implement specific functionality. Multiple objects of a particular class can be defined to implement the functions within the class. Objects can be defined as instances created at run time. These classes can also be inherited by other new classes which take in the public and protected functionalities by default.

C++ includes several operators such as comparison, arithmetic, bit manipulation, logical operators polymorphism, virtual and friend functions, templates, namespaces and pointers. etc. One of the most attractive features of C++ is that it enables the overloading of certain operators such as addition.

BANKING SYSTEM

INTRODUCTION

Background:- Banks have been around since the first currencies were minted, perhaps even before that, in some form or another. Ancient homes didn't have the benefit of a steel safe, therefore, most wealthy people held accounts at their temples. Numerous people, like priests or temple workers whom one hoped were both devout and honest, always occupied the temples, adding a sense of security However, things worked just the same way in these banks as they do today, only difference they were very slow. During the 1950s, researchers at the Stanford Research Institute invented "ERMA", the Electronic Recording Method of Accounting computer processing system. ERMA computerized the manual processing of checks and account management and automatically updated and posted checking accounts. Stanford Research Institute also invented MICR (magnetic ink character recognition) as part of ERMA. MICR allowed computers to read special numbers at the bottom of checks that allowed computerized tracking and accounting of check transactions. However today much more sophisticated and faster banking system are used.

Objective:- We are determined to design a system which is intended in managing all the accounts in the bank, their deposits and their withdrawals. The main objective of Banking system is to add, modify, delete accounts and also keep track of all the activities such as loans, fixed deposits etc… associated with it.

Applications:-The project that we have undertaken aims to develop a banking system that is clean user-friendly and multi functonal. The development of this application includes a number of fields such that user feels comfortable. It provides the customer a safe and secure transaction. It also aims to provide faster performance.

Limitations:- It is not a multitasking program.

REPORT

This program consists of **one** class and **twelve** functions.

DETAILS OF CLASS ACCOUNT:-

DATA MEMBERS:-

acc_no:- Refers to the account number.
name:- Refers to the name of the account holder.
address:- Refers to the address of the account holder.
balance:- Refers to the balance money in the account.

MEMBER FUNCTIONS:-

create_account():-Function to create new account and store details like name,
address and initial deposit.
display_account():-Function to display details of a specific account.
modify_account():-Function to allow user to modify the details of a book.
returnacc_no():-Function to get the account number of a specific account.
return_name():-Function to get the name of the account holder.
retbal():- Function to return the balance of a specific account.
depositbalance():- This function accepts the deposit as a parameter and adds it
to the original balance.
withdrawbalance():-This function accepts the withdrawal amount as a parameter
and subtracts it from the original balance.
report():-Funtion to display the account number, name, address and balance of
an account.
lfdreport():- Function to display the account number, name, loan status (Yes or
No) and fixed deposit status (Yes or No) of an account.

OTHER FUNCTIONS:-

write_account():- Function to store the new account record in the file.

bankreport():- Function to display all the accounts in the bank along with their
details and also displays the total money in the bank.

Lfdrep():- Function to display all the accounts in the bank along with the name of the account holder, the loan and fixed deposit status (Yes or No).

find_accountno():- Function to search a specific account using the user given account number and display the account details.

find_accountname():-Function to search a specific account using the user given name of the account holder and display the account details.

modify_acc():- Function to search a specific account using the user given account number and then modify its details(name, address or initial deposit).

delete_account():- Function to search a specific account using the user given account number and then delete it.

admin_menu(): Displays the menu with the options which only an administrator can access. The administrator has to enter the option number accordingly.

deposit():-Function to allow a user to access their account using their account number and then allow them to deposit money into their account.

withdraw():-Function to allow a user to access their account using their account number and then allow them to withdraw money from their account.

createfd():- Function to allow a user to access their account using their account number and then allow them to create a fixed deposit which gives them an interest over a period of time.

loan():- Function to allow a user to access their account using their account number and then allow them to apply for any kind of loan, which they have return in installments with an added interest, which is clearly displayed using a loan schedule.

PROGRAM

```cpp
#include<fstream.h>
#include<conio.h>
#include<stdio.h>
#include<process.h>
#include<string.h>
#include<iomanip.h>
#include<math.h>

//CLASS  "account" STARTS HERE

class account
{
 int acc_no;
 char name[50];
 char address[200];
 float balance;

 public:

 char loan[10];
 char fixdep[10];

 void create_account()  //Member function to create a new account
  {
    int d;
    cout<<"\nCREATE A NEW ACCOUNT\n";
    cout<<"\nEnter the account number:- ";
    cin>>acc_no;
    cout<<"\nEnter the name of the account holder:- ";
     gets(name);
    cout<<"\nEnter the address of the account holder(Please specify";
    cout<<"important landmarks):-\n";
    gets(address);
    cout<<"\nEnter the amount of initial deposit (SHOULD NOT BE LESS";
    cout<<"THAN Rs 1000) :- ";
    cin>>d;
    cout<<"\nDo you have any previous loans?\n";
    gets(loan);
    cout<<"\nDo you have any previous fixed deposit?\n";
    gets(fixdep);
    if(d>1000)
```

```cpp
   {
     balance=d;
   }
 else
   {
     cout<<"\n\n\n SORRY!!! ACCOUNT CANNOT BE CREATED. Initial";
     cout<<"deposit cannot be less than Rs 1000. It is a bank policy";
     return;
   }
 cout<<"\n\n\n ACCOUNT SUCCESSFULLY CREATED. ACCOUNT WILL";
 cout<<" BE ACTIVATED WITHIN 3 WORKING DAYS. ";
}

void display_account()   //Member function to display details of an account
 {
   cout<<"\nACCOUNT DETAILS\n";
   cout<<"***********************\n";
   cout<<"\nAccount Number:-"<<acc_no;
   cout<<"\nName of the account holder:-"<<name;
   cout<<"\nAddress of the account holder:- "<<address;
   cout<<"\nInitial deposit:- "<<balance;
   cout<<"\nLoan:- "<<loan;
   cout<<"\nFixed Deposit:- "<<fixdep;
 }

void modify_account()    //Member function to modify details of an account
 {
   char v[10];
   float n;
   cout<<"\n\nMODIFY ACCOUNT DETAILS\n";
   cout<<"\n***********************\n";
   cout<<"\nWhat do you want to modify ?(name, address, balance,loan,fd)\n";
   gets(v);
   if(strcmpi(v,"name")==0)
    {
     cout<<"\nModify name of the account holder....";
     cout<<"\nEnter the modified name of the account holder:- ";
     gets(name);
    }
  else if(strcmpi(v,"address")==0)
    {
     cout<<"\nModify address of the account holder";
     cout<<"\nEnter the modified address of the account holder:- ";
     gets(address);
    }
   else if(strcmpi(v,"balance")==0)
```

```cpp
        {
         cout<<"\nModify balance of the account holder";
         cout<<"\nEnter the modified balance of the account holder:- ";
         cin>>n;
         if(n<1000)
          {
           cout<<"SORRY! Balance cannot be less than 1000 bank policy";
          }
         else
         balance=n;
        }
      else if(strcmpi(v,"loan")==0)
        {
         cout<<"\nModify loan status of the account holder";
         cout<<"\nEnter the modified loan status of the account holder:- ";
         gets(loan);
        }

   else if(strcmpi(v,"fd")==0)
       {
        cout<<"\nModify fixed deposit status of the account holder";
       cout<<"\nEnter the modified fixed deposit status of the account holder:- ";
        gets(loan);
       }

    else
      {
       cout<<"\nCANNOT BE MODIFIED";
      }
   }
   int returnacc_no() //Member function to return the account number
    {
      return acc_no;
    }
   char* return_name() /*Member function to return the name of the account
                          holder*/
    {
      return name;
    }
   float retbal() //Member function to return the balance of the account
    {
      return balance;
    }
  float depositbalance(float n) /*Member function to change the balance
                              during deposit*/
    {
```

```cpp
   balance=n+balance;
   return balance;
 }

 float withdrawbalance(float n)
 {
   balance=balance-n;
   return balance;
 }

 void report() //Display the account details
 {
 cout<<acc_no<<"\t\t\t "<<name<<"\t\t  "<<address<<"\t\t  "<<balance<<"\n";
 }

 void lfdreport() //Member function to display loan and fixed deposit status
 {
 cout<<acc_no<<"\t\t\t "<<name<<"\t\t      "<<loan<<"\t\t "<<fixdep<<"\n";
 }
}; //Class ends here

//Global declaration for stream object and class account object

fstream f;
account acc;

void write_account()  //Function to write in the file
{
 int n;
 char ch;
 f.open("account.dat",ios::out|ios::app);
 do
 {
 clrscr();
 acc.create_account();
 f.write((char*)&acc,sizeof(account));
 cout<<"\n\n DO YOU WANT TO CREATE ANY MORE";
 cout<<"ACCOUNTS?(y/n)???";
 cin>>ch;
 }
 while(ch=='y'||ch=='Y');
 f.close();
}
 void bankreport() //Function to display all accounts in the bank
 {
  int c=0;
```

```cpp
   clrscr();
   f.open("account.dat",ios::in);
   if(!f)
    {
     cout<<"SORRY !!!!! THE GIVEN FILE COULDNOT BE OPENED";
     getch();
     return;
    }
cout<<"\n\n\t\tBANK REPORT\n\n";
cout<<"************************************************************";
cout<<"***********\n";
cout<<"ACCOUNT NUMBER"<<setw(16)<<"NAME"<<setw(20)<<"  ADDRESS";
cout<<setw(22)<<"   BALANCE\n";
cout<<"************************************************************";
cout<<"***********\n";
while(f.read((char*)&acc,sizeof(account)))
   {
    acc.report();
    c=c+acc.retbal();
   }
cout<<"************************************************************";
cout<<**********\n";
cout<<"TOTAL BANK BALANCE:-"<<"\t\t\t\t\t\t  "<<c;
cout<<"\n************************************************************";
cout<<"***********\n";
getch();
f.close();
}

void lfdrep()  /*Function to display the loan and fixed deposit status of all
               accounts*/
  {
   clrscr();
   f.open("account.dat",ios::in);
   cout<<"\t\tLOAN AND FIXED DEPOSIT RECORD";
   cout<<"\n***********************************************************";
   cout<<"***********\n";
   cout<<"ACCOUNT NUMBER"<<setw(16)<<"NAME"<<setw(20)<<"  LOAN";
   cout<<setw(22)<<"FIXED DEPOSIT\n";
   cout<<"***********************************************************";
   cout<<"*********\n";
   while(f.read((char*)&acc,sizeof(account)))
    {
     acc.lfdreport();
    }
   f.close();
```

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```cpp
   getch();
 }

 void delete_account() //Function to delete an account
  {
   int n;
   int flag=0;
   clrscr();
   cout<<"\n\n\n DELETE AN ACCOUNT \n\n";
   cout<<"Enter the account number:- ";
    cin>>n;
   f.open("account.dat",ios::in|ios::out);
   fstream f1;
   f1.open("temp.dat",ios::out);
   f.seekg(0,ios::beg);
   while(f.read((char*)&acc,sizeof(account)))
    {
     if(acc.returnacc_no()!=n)
     f1.write((char*)&acc,sizeof(account));
     else
     flag=1;
    }
   f.close();
   f1.close();
   remove("account.dat");
   rename("temp.dat","account.dat");
   if(flag==1)
    cout<<"\n\nACCOUNT SUCCESSFULLY DELETED";
   else
    cout<<"\n\nTHERE IS NO ACCOUNT WITH THIS ACCOUNT NUMBER";
   getch();
 }

 void modify_acc() //Function to modify details of an account
 {
  int n,pos;
  int flag=0;
  clrscr();
  cout<<"\n\n MODIFY ACCOUNT  ";
  cout<<"\n\nEnter the account number:- ";
  cin>>n;
  f.open("account.dat",ios::in|ios::out);
  while(f.read((char*)&acc,sizeof(account))&&flag==0)
   {
    if(acc.returnacc_no()==n)
     {
```

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```cpp
      acc.display_account();
      acc.modify_account();
      pos=-1*sizeof(account);
      f.seekp(pos,ios::cur);
      f.write((char*)&acc,sizeof(acc));
      cout<<"\n\n\nACCOUNT DETAILS SUCCESSFULLY MODIFIED\n\n";
      acc.display_account();
      flag=1;
     }
   }
  f.close();
  if(flag==0)
   cout<<"\n\nTHERE IS NO ACCOUNT WITH THE GIVEN ACCOUNT";
   cout<<"NUMBER!! ";
 getch();
 }

void find_accountname() /*Function to find account using an account holder's
                         name*/
{
 char n[30];
 cout<<"Enter the name of the account holder:- ";
 gets(n);
 cout<<"\n ACCOUNT DETAILS \n";
 int flag=0;
 f.open("account.dat",ios::in);
 while(f.read((char*)&acc,sizeof(account))&&flag==0)
 {
  if(strcmpi(acc.return_name(),n)==0)
   {
    acc.display_account();
    flag=1;
   }
 }
 f.close();

 if(flag==0)
 cout<<"\n\nACCOUNT DOESNOT EXIST";
 getch();
}

void find_accountno()//Function to find an account using an account number
{
 int n;
 cout<<"Enter account number:- ";
 cin>>n;
```

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```cpp
   cout<<"\n ACCOUNT DETAILS \n";
   int flag=0;
   f.open("account.dat",ios::in);
   while(f.read((char*)&acc,sizeof(account))&&flag==0)
   {
    if(acc.returnacc_no()==n)
     {
      acc.display_account();
      flag=1;
     }
   }
   f.close();
   if(flag==0)
   cout<<"\n\nACCOUNT DOESNOT EXIST";
   getch();
}

void deposit() //Function to deposit money into an account
 {
   clrscr();
   int flag=0;
   char ch;
   int n;
   float a;
   cout<<"\n\nDEPOSIT MONEY";
   cout<<"\n\n\nEnter the account number:- ";
   cin>>n;
   f.open("account.dat",ios::in|ios::out);
   while(f.read((char*)&acc,sizeof(account))&&flag==0)
   {
    if(n==acc.returnacc_no())
     {
       flag=1;
       cout<<"\nYour current account balance is:-  "<<acc.retbal();
       cout<<"\nHow much do you want to deposit:-  ";
       cin>>a;
       cout<<"Your new current account balance is:- "<<acc.depositbalance(a);
       int pos = -1*sizeof(acc);
       f.seekp(pos,ios::cur);
       f.write((char*)&acc,sizeof(account));
       cout<<"\n\n\tMoney deposited successfully!!!";
     }
   }
   if(flag==0)
   cout<<"\nThis account number does not exist";
   getch();
```

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```cpp
  f.close();
 }

void withdraw() //Function to withdraw money from an account
 {
  clrscr();
  int flag=0;
  char ch;
  int n;
  float a;
  cout<<"\n\nWITHDRAW MONEY";
  cout<<"\n\n\nEnter the account number:- ";
  cin>>n;
  f.open("account.dat",ios::in|ios::out);
  while(f.read((char*)&acc,sizeof(account))&&flag==0)
   {
     if(n==acc.returnacc_no())
         {
          flag=1;
          cout<<"\nYour current account balance is:-  "<<acc.retbal();
          cout<<"\nHow much do you want to withdraw:-  ";
          cin>>a;
          cout<<"Your new current account balance is:- "<<acc.withdrawbalance(a);
          int pos = -1*sizeof(acc);
          f.seekp(pos,ios::cur);
          f.write((char*)&acc,sizeof(account));
          cout<<"\n\n\tMoney withdrawed successfully!!!";
         }
   }
  if(flag==0)
  cout<<"\nThis account number does not exist";
  getch();
  f.close();
 }

void loan() //Function to apply for a loan
 {
  int i,flag=0,an;
  int n,ch,r,s;
  int t,u;
  float a,p,x;
  clrscr();
  cout<<"\t\t\t\tLOAN..";
  cout<<"\n\nNo matter what your needs and aspiration,our financing packages";
  cout<<"\nand offerings will help you and provide you with the necessary";
  cout<<"\nsupport to get there. ";
```

```cpp
        cout<<"\n\nEnter your account number:- ";
        cin>>an;
        f.open("account.dat",ios::in|ios::out);
        while(f.read((char*)&acc,sizeof(account))&&flag==0)
                {
                if(acc.returnacc_no()==an)
                        {
                            strcpy(acc.loan,"Yes");
                        int pos = -1*sizeof(acc);
                        f.seekp(pos,ios::cur);
                            f.write((char*)&acc,sizeof(account));
                    clrscr();
                    cout<<" \n\n\t\tTYPES OF LOANS";
                    cout<<"\n\t****************************\n";
                    cout<<"\n\n1.Personal loan against current account balance";
                    cout<<"\n2.Car loan against current account balance ";
                    cout<<"\n3.Educational loan against current account balance ";
                    cout<<"\n4. Medical loan against current account balance ";
                    cout<<"\n5.Mortgage loan against current account balance ";
                     cout<<"\n\n\nPlease Enter the number of your preference:- ";
                     cin>>ch;
                     clrscr();
 switch(ch)
   {
  case 1:cout<<"\t\t\tPERSONAL LOAN";
          cout<<"\nYou have selected personal loan. \nFollow us through";
        cout<<"the following procedures \nand you are one step closer to";
        cout<<"achieving your desire";
         cout<<"\n\nAs per our bank policy, we are providing you with an";
        cout<<"affordabe 4% interest";
          cout<<"\n\nEnter the loan amount:- ";
          cin>>a;
          cout<<"\nEnter the time period:- ";
          cin>>t;
          cout<<"\nEnter the number of installments: -";
          cin>>n;
          p=a*0.04*t;
          s=p+a;
          r=s/n;
          u=s;
          clrscr();
          cout<<"\n\t\t          LOAN SCHEDULE...";
        cout<<"\n************************************************";
        cout<<"\n****************";
       cout<<"\nNo."<<setw(20)<<"Installment"<<setw(20)<<"Balance"<<setw(20)";
        cout<<"Interest\n";
```

```cpp
        cout<<"\n*************************************************";
    cout<<"\n****************";
        for( i=1;i<=n;i++)
        {
            s=s-r;
            cout<<" "<<i<<setw(20)<<   r    <<setw(20)<< s <<setw(20)";
        cout<<"  4%\n";
        }
        cout<<"*************************************************";
    cout<<"****************";
        x=acc.withdrawbalance(u);
        int pos = -1*sizeof(acc);
        f.seekp(pos,ios::cur);
        f.write((char*)&acc,sizeof(account));
        cout<<"\n\nYour account balance after repaying the loan is "<<x;
        break;

case 2: cout<<"\t\t\tCAR  LOAN";
        cout<<"\nYou have selected Car loan. \nFollow us through";
        cout<<"the following procedures \nand you are one step closer to";
        cout<<"achieving your desire";
        cout<<"\n\nAs per our bank policy, we are providing you with an";
        cout<<"affordabe 4.5% interest";
        cout<<"\n\nEnter the loan amount:- ";
        cin>>a;
        cout<<"\nEnter the time period:- ";
        cin>>t;
        cout<<"\nEnter the number of installments: -";
        cin>>n;
        p=a*0.045*t;
        s=p+a;
        r=s/n;
        u=s;
        clrscr();
        cout<<"\n\t\t          LOAN SCHEDULE...";
    cout<<"\n*************************************************";
    cout<<"\n****************";
    cout<<"\nNo."<<setw(20)<<"Installment"<<setw(20)<<"Balance"<<setw(20)";
    cout<<"Interest\n";
        cout<<"\n*************************************************";
    cout<<"\n****************";
        for( i=1;i<=n;i++)
        {
            s=s-r;
            cout<<" "<<i<<setw(20)<<    r    <<setw(20)<< s <<setw(20)";
        cout<<"  4.5%\n";
```

```cpp
                }
              cout<<"*********************************************";
          cout<<"****************";
            x=acc.withdrawbalance(u);
            int pos = -1*sizeof(acc);
            f.seekp(pos,ios::cur);
            f.write((char*)&acc,sizeof(account));
            cout<<"\n\nYour account balance after repaying the loan is "<<x;
            break;

     case 3: cout<<"\t\t\tEDUCATIONAL  LOAN";
            cout<<"\nYou have selected Educational loan. \nFollow us through";
          cout<<"the following procedures \nand you are one step closer to";
          cout<<"achieving your desire";
             cout<<"\n\nAs per our bank policy, we are providing you with an";
          cout<<"affordabe 3% interest";
            cout<<"\n\nEnter the loan amount:- ";
            cin>>a;
            cout<<"\nEnter the time period:- ";
            cin>>t;
            cout<<"\nEnter the number of installments: -";
            cin>>n;
            p=a*0.03*t;
            s=p+a;
            r=s/n;
            u=s;
            clrscr();
            cout<<"\n\t\t          LOAN SCHEDULE...";
          cout<<"\n*********************************************";
          cout<<"\n****************";
         cout<<"\nNo."<<setw(20)<<"Installment"<<setw(20)<<"Balance"<<setw(20)";
          cout<<"Interest\n";
            cout<<"\n*********************************************";
          cout<<"\n****************";
              for( i=1;i<=n;i++)
              {
                   s=s-r;
                   cout<<" "<<i<<setw(20)<<    r    <<setw(20)<< s  <<setw(20)";
               cout<<"  3%\n";
              }
            cout<<"*********************************************";
          cout<<"****************";
            x=acc.withdrawbalance(u);
            int pos = -1*sizeof(acc);
            f.seekp(pos,ios::cur);
            f.write((char*)&acc,sizeof(account));
```

```cpp
                cout<<"\n\nYour account balance after repaying the loan is "<<x;
                break;

case 4: cout<<"\t\t\tMEDICAL  LOAN";
            cout<<"\nYou have selected MEDICAL loan. \nFollow us through";
        cout<<"the following procedures \nand you are one step closer to";
        cout<<"achieving your desire";
            cout<<"\n\nAs per our bank policy, we are providing you with an";
        cout<<"affordabe 2% interest";
            cout<<"\n\nEnter the loan amount:- ";
            cin>>a;
            cout<<"\nEnter the time period:- ";
            cin>>t;
            cout<<"\nEnter the number of installments: -";
            cin>>n;
            p=a*0.02*t;
            s=p+a;
            r=s/n;
            u=s;
            clrscr();
            cout<<"\n\t\t         LOAN SCHEDULE...";
        cout<<"\n************************************************";
         cout<<"\n****************";
       cout<<"\nNo."<<setw(20)<<"Installment"<<setw(20)<<"Balance"<<setw(20);
        cout<<"Interest\n";
            cout<<"\n************************************************";
        cout<<"\n****************";
            for( i=1;i<=n;i++)
            {
                 s=s-r;
                 cout<<" "<<i<<setw(20)<<    r    <<setw(20)<< s <<setw(20);
            cout<<"  2%\n";
            }
            cout<<"************************************************";
        cout<<"****************";
            x=acc.withdrawbalance(u);
            int pos = -1*sizeof(acc);
            f.seekp(pos,ios::cur);
            f.write((char*)&acc,sizeof(account));
            cout<<"\n\nYour account balance after repaying the loan is "<<x;
            break;

case 5: cout<<"\t\t\tMORTGAGE LOAN";
            cout<<"\nYou have selected Mortgage loan. \nFollow us through";
        cout<<"the following procedures \nand you are one step closer to";
        cout<<"achieving your desire";
```

```cpp
            cout<<"\n\nAs per our bank policy, we are providing you with an";
        cout<<"affordabe 4.5% interest";
            cout<<"\n\nEnter the loan amount:- ";
            cin>>a;
            cout<<"\nEnter the time period:- ";
            cin>>t;
            cout<<"\nEnter the number of installments: -";
            cin>>n;
            p=a*0.045*t;
            s=p+a;
            r=s/n;
            u=s;
            clrscr();
            cout<<"\n\t\t          LOAN SCHEDULE...";
        cout<<"\n************************************************";
         cout<<"\n****************";
        cout<<"\nNo."<<setw(20)<<"Installment"<<setw(20)<<"Balance"<<setw(20)";
         cout<<"Interest\n";
            cout<<"\n************************************************";
        cout<<"\n****************";
            for( i=1;i<=n;i++)
            {
                 s=s-r;
                 cout<<" "<<i<<setw(20)<<    r    <<setw(20)<<  s  <<setw(20)";
            cout<<"   4.5%\n";
             }
            cout<<"************************************************";
        cout<<"****************";
            x=acc.withdrawbalance(u);
            int pos = -1*sizeof(acc);
            f.seekp(pos,ios::cur);
            f.write((char*)&acc,sizeof(account));
            cout<<"\n\nYour account balance after repaying the loan is "<<x;
            break;

    default:cout<<"SORRY WRONG CHOICE!!!! ";
}
flag=1;
}
}
f.close();
if(flag==0)
{
cout<<"THIS ACCOUNT NUMBER DOESNOT EXIST";
}
getch();
```

```cpp
}
void createfd() //Function to create a fixed deposit
{
 int n,u,t,choice,ch,c,flag=0,age,i;
float m,y,p,v;
char x;
clrscr();
cout<<"\n\n\nCREATE A FIXED DEPOSIT..";
cout<<"\n*******************************";
cout<<"\nThe Fixed Deposit Account is an account for customers who have a lump";
cout<<" sum of";
cout<<" \nfunds or funds not required immediately and who are looking for a";
cout<<" consistently good";
cout<<"and assured return on their money.";
 cout<<"\n\nEnter the account number:- ";
 cin>>n;
 f.open("account.dat",ios::in|ios::out);
 while(f.read((char*)&acc,sizeof(account))&&flag==0)
   {
        if(n==acc.returnacc_no())
         {
          strcpy(acc.fixdep,"Yes");
             int pos = -1*sizeof(acc);
             f.seekp(pos,ios::cur);
             f.write((char*)&acc,sizeof(account));
          flag=1;
          cout<<"\nEnter the amount to deposited in the FD\n( Be sure that you";
        cout<<" have enough money";
        cout<<"in your current account):-\n ";
         cin>>p;
        clrscr();
         cout<<"\n\nTYPES OF FIXED DEPOSIT";
         cout<<"\n*************************";
         cout<<"\n1.Monthly";
         cout<<"\n2.Quaterly";
         cout<<"\n3.Half Yearly";
         cout<<"\n4.Yearly";
         cout<<"\nEnter the number of your preference:-(1-4) ";
         cin>>ch;
         clrscr();


cout<<"*************************************************************************
";
 cout<<"\nNo.   Time period"<<setw(25)<<" Normal Interest rate"<<setw(30)<<" For Senior";
 cout<<"Citizens\n";
```

```cpp
cout<<"************************************************************************";
cout<<"\n1. Less than one year"<<setw(20)<<"5% interest"<<setw(30)<<"5.5% interest\n";
cout<<"\n2. Between 1-4 years"<<setw(20)<<"7% interest"<<setw(30)<<"7.5% interest\n";
cout<<"\n3. Between 4-7 years"<<setw(20)<<"9% interest"<<setw(30)<<"9.5% interest\n";
cout<<"\n4. More than 7 years"<<setw(20)<<"9.5% interest"<<setw(30)<<"10% interest\n";
        cout<<"\n\n\nEnter your choice:- ";
        cin>>choice;
        cout<<"\n\nEnter your age:-";
        cin>>age;
        cout<<"\nEnter the exact time period:-";
        cin>>t;
        cout<<"\n\nHow have you specified the time period??";
        cout<<"\n1.Days";
        cout<<"\n2.Months";
        cout<<"\n3.Years\n";
        cout<<"\nEnter the number of your preference:-(1-3):-  ";
        cin>>u;
        switch(u)
             {
              case 1:u=u/365;
              break;
              case 2:u=u/12;
              break;
              case 3:u=u;
              break;
              default:cout<<"Sorry Wrong choice";
             }

        cout<<"\n\n\nType of interest";
        cout<<"\n*****************";
        cout<<"\n1.Simple";
        cout<<"\n2.Compound";
         cout<<"\nEnter the number of your preference:-(1-2):- " ;
         cin>>c;
        clrscr();
        switch(choice)
         {
             float r;
             case 1:cout<<"You have chosen to deposit for less than one year";
                 if(age>=60)
                     {
                      r=5.5;
cout<<"\n\nSince you are a senior citizen, our bank is happy to tell you that"; cout<<"will\nbe
getting an extra 0.5% interest according to our bank policy";
```

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```cpp
cout<<" that is 5.5%";
                            }
                        else
                            {
                               r=5;
                               cout<<" at the rate of 5% ";
                            }
                               cout<<"\n\nAlso you have chosen to renew your fixed";
                    cout<<" deposit every ";
                            switch(ch)
                             {
                               case 1:cout<<"Month";
                                       break;
                               case 2:cout<<"Quater";
                                       break;
                               case 3:cout<<"Half year";
                                       break;
                               case 4:cout<<"year";
                                       break;
                             }

                 switch(c)
                        {
                        case 1:i=(p*r*t)/100;
                                   p=p+i;
                                   break;
                        case 2:p=p*pow(1+(r/100),t);
                                   break;
                        }
             cout<<"\n\nYOUR NEW BALANCE IN YOUR FIXED DEPOSIT IS "<<p;
              v=acc.withdrawbalance(p);
             pos = -1*sizeof(acc);
           f.seekp(pos,ios::cur);
            f.write((char*)&acc,sizeof(account));
         break;

    case 2:cout<<"\nYou have chosen to deposit for Between 1-4 years";
           if(age>=60)
            {
             r=7.5;
              cout<<"\nSince you are a senior citizen, our bank is happy to tell";
         cout<<"you that you will \nbe getting an extra 0.5% interest";
         cout<<"to our bank policy that is 7.5%";
            }
         else
            {
```

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```cpp
                              r=7;
                              cout<<" at the rate of 7% " ; }
                              cout<<"\nAlso you have chosen to renew your fixed deposit every ";
                              switch(ch)
                                {
                                 case 1:cout<<"Month";
                                          break;
                                 case 2:cout<<"Quater";
                                          break;
                                 case 3:cout<<"Half year";
                                          break;
                                 case 4:cout<<"year";
                                          break;
                                }

      switch(c)
      {
      case 1:i= (p*r*t)/100;
                p=p+i;
                break;
      case 2:p=p*pow(1+(r/100),t);
                break;
      }
           cout<<"\n\nYOUR NEW BALANCE IN YOUR FIXED DEPOSIT IS "<<p;
                  v=acc.withdrawbalance(p);
                   pos = -1*sizeof(acc);
                  f.seekp(pos,ios::cur);
                   f.write((char*)&acc,sizeof(account));
                break;

   case 3: cout<<"\nYou have chosen to deposit for between 4-7 years";
          if(age>=60)
            {
             r=9.5;
                  cout<<"\nSince you are a senior citizen, our bank is happy to tell";
                  cout<<"you that you will \nbe getting an extra 0.5% interest";
                  cout<<"to our bank policy that is 9.5%";
            }
       else
       {
       r=9;
        cout<<" at the rate of 9% ";
}
       cout<<"\nAlso you have chosen to renew your fixed deposit every ";
       switch(ch)
       {
```

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```cpp
    case 1:cout<<"Month";
            break;
    case 2:cout<<"Quater";
            break;
    case 3:cout<<"Half year";
            break;
    case 4:cout<<"year";
            break;
    }
    switch(c)
    {
    case 1:i= (p*r*t)/100;
            p=p+i;
            break;
    case 2:p=p*pow(1+(r/100),t);
            break;
    }
                cout<<"\n\nYOUR NEW BALANCE IN YOUR FIXED DEPOSIT IS";
              cout<<""<<p;
                v=acc.withdrawbalance(p);
                    pos = -1*sizeof(acc);
                f.seekp(pos,ios::cur);
                    f.write((char*)&acc,sizeof(account));
              break;

 case 4: cout<<"You have chosen to deposit for more than seven year";
        if(age>=60)
            {
                r=10;
                cout<<"\nSince you are a senior citizen, our bank is happy to tell";
                cout<<"you that you will \nbe getting an extra 0.5% interest";
                cout<<"to our bank policy that is 7.5%";
            }
    else
    {
    r=9.5;
     cout<<" at the rate of 9.5% ";}
     cout<<"\nAlso you have chosen to renew your fixed deposit every ";
     switch(ch)
     {
     case 1:cout<<"Month";
            break;
     case 2:cout<<"Quater";
            break;
     case 3:cout<<"Half year";
            break;
```

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```cpp
        case 4:cout<<"year";
                break;
        }
        switch(c)
        {
        case 1:i= (p*r*t)/100;
                p=p+i;
                break;
        case 2:p=p*pow(1+(r/100),t);
                break;
        }
            cout<<"\n\nYOUR NEW BALANCE IN YOUR FIXED DEPOSIT IS "<<p;
                    v=acc.withdrawbalance(p);
                     pos = -1*sizeof(acc);
                   f.seekp(pos,ios::cur);
                     f.write((char*)&acc,sizeof(account));
            break;
  default:cout<<"Wrong choice";
}//switch closing
flag=1;
}//if closing
}//while closing
  f.close();
  if(flag==0)
  {
cout<<"SORRY !!! THIS ACCOUNT NUMBER DOESNOT EXIST";
  }
  getch();
}

void intro() //Function to display the introduction
 {
 clrscr();
 cout<<"\t\t\t\t BANKING SYSTEM";
 cout<<"\n\t\t\t\t***************";
 cout<<"\n\nMADE BY: JESSICA JUDITH D'SOUZA";
 cout<<"\n\nSCHOOL: M.E.S INDIAN SCHOOL";
 cout<<"\n\n\n\n\n\n\nDISCLAIMER..";

cout<<"\n\nThe information on this system is provided for general reference"; cout<<"purposes
only.\nWhilst every effort is made to ensure that the system"; cout<<" is up to date and
accuratethe system does not warrant, nor does it";
cout<<" accept any responsibility or liability\nfor,the accuracy or";
cout<<" completeness of the content or for any loss which may arise\nfrom"; cout<<" reliance on
information contained in this system.";
getch();
```

```cpp
 }

void admin_menu() //Function to display the Administrator menu
 {
 clrscr();
 int choice;
 cout<<"\n\n\n\t\tADMINISTRATOR MENU";
 cout<<"\n\n\t1.OPEN AN ACCOUNT";
 cout<<"\n\n\t2.DISPLAY ALL ACCOUNT IN THE BANK";
 cout<<"\n\n\t3.DISPLAY ALL THE LOANS AND FIXED DEPOSIT IN THE";
 cout<<" BANK";
 cout<<"\n\n\t4.DISPLAY DETAILS OF A SPECIFIC ACCOUNT";
 cout<<"USING ACCOUNT NUMBER";
 cout<<"\n\n\t5.DISPLAY DETAILS OF A SPECIFIC ACCOUNT  USING";
 cout<<" ACCOUNT NAME";
 cout<<"\n\n\t6.MODIFY DETAILS OF A SPECIFIC ACCOUNT";
 cout<<"\n\n\t7.DELETE AN ACCOUNT";
 cout<<"\n\n\t8.BACK TO MAIN MENU";
 cout<<"\n\n\n\tPLEASE ENTER THE NUMBER OF YOUR PREFERENCE(1-8):-";
 cin>>choice;
 switch(choice)
 {
 case 1:clrscr();
         write_account();
         break;

 case 2:clrscr();
         bankreport();
         break;

 case 3:clrscr();
         lfdrep();
         break;

 case 4:clrscr();
         find_accountno();
         break;

 case 5:clrscr();
         find_accountname();
         break;

 case 6:clrscr();
         modify_acc();
         break;
```

```cpp
    case 7:clrscr();
            delete_account();
            break;

    case 8: return;

    default:cout<<"\a";
    }
    admin_menu();
    }
    void main() //Main function of the program
    {
     clrscr();
     cout<<"\n\n\n\tMAIN MENU";
     cout<<"\n\n\t1.ADMINISTRATOR MENU";
     cout<<"\n\n\t2.DEPOSIT MONEY";
     cout<<"\n\n\t3.WITHDRAW MONEY";
     cout<<"\n\n\t4.CREATE A FIXED DEPOSIT";
     cout<<"\n\n\t5.APPLY FOR A LOAN";
     cout<<"\n\n\t6.EXIT";
     cout<<"\n\n\n\n\tPLEASE ENTER THE NUMBER OF YOUR PREFERENCE:- ";
     cin>>ch;
     switch(ch)
      {
       case 1:admin_menu();
                break;
       case 2:clrscr();
               deposit();
                break;
       case 3:clrscr();
                withdraw();
                break;
      case 4:clrscr();
               createfd();
               break;
      case 5:clrscr();
               loan();
                break;
      case 6:exit(0);
    default:cout<<"\a";
     }
     }
    while(ch!=6);
    getch();

    }//Program ends here
```

OUTPUT

Introduction Page

```
                    BANKING SYSTEM
                    *****************

  MADE BY: JESSICA JUDITH D'SOUZA

  SCHOOL: M.E.S INDIAN SCHOOL




  DISCLAIMER..

  The information on this system is provided for general reference purposes only.
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  the system does not warrant, nor does it accept any responsibility or liability
  for,the accuracy or completeness of the content or for any loss which may arise
  from reliance on information contained in this system.
```

Main Menu

```
          MAIN MENU

          1.ADMINISTRATOR MENU

          2.DEPOSIT MONEY

          3.WITHDRAW MONEY

          4.CREATE A FIXED DEPOSIT

          5.APPLY FOR A LOAN

          6.EXIT


          PLEASE ENTER THE NUMBER OF YOUR PREFERENCE:- 1_
```

Administrator menu

```
            ADMINISTRATOR MENU

    1.OPEN AN ACCOUNT

    2.DISPLAY ALL ACCOUNT IN THE BANK

    3.DISPLAY ALL THE LOANS AND FIXED DEPOSIT IN THE BANK

    4.DISPLAY DETAILS OF A SPECIFIC ACCOUNT USING ACCOUNT NUMBER

    5.DISPLAY DETAILS OF A SPECIFIC ACCOUNT USING ACCOUNT NAME

    6.MODIFY DETAILS OF A SPECIFIC ACCOUNT

    7.DELETE AN ACCOUNT

    8.BACK TO MAIN MENU



    PLEASE ENTER THE NUMBER OF YOUR PREFERENCE(1-8):-1_
```

Open an account

```
CREATE A NEW ACCOUNT

Enter the account number:- 1698

Enter the name of the account holder:- Jess

Enter the address of the account holder:-
India

Enter the amount of initial deposit (SHOULD NOT BE LESS THAN Rs 1000) :- 9000

Do you have any previous loans?
No

Do you have any previous fixed deposit?
No


 ACCOUNT SUCCESSFULLY CREATED. ACCOUNT WILL BE ACTIVATED WITHIN 3 WORKING DAYS.


 DO YOU WANT TO CREATE ANY MORE ACCOUNTS?(y/n)???y_
```

```
CREATE A NEW ACCOUNT

Enter the account number:- 2000

Enter the name of the account holder:- Veena

Enter the address of the account holder:-
India

Enter the amount of initial deposit (SHOULD NOT BE LESS THAN Rs 1000) :- 2000

Do you have any previous loans?
No

Do you have any previous fixed deposit?
No


  ACCOUNT SUCCESSFULLY CREATED. ACCOUNT WILL BE ACTIVATED WITHIN 3 WORKING DAYS.


  DO YOU WANT TO CREATE ANY MORE ACCOUNTS?(y/n)???n_
```

Display all the accounts in the bank

```
                    BANK REPORT

********************************************************************
ACCOUNT NUMBER          NAME            ADDRESS           BALANCE
********************************************************************
1698                    Jess            India                9000
2000                    Veena           India                2000
********************************************************************
TOTAL BANK BALANCE:-                                        11000
********************************************************************
```

Display the loan and fixed deposit status of all accounts

```
              LOAN AND FIXED DEPOSIT RECORD
********************************************************************
ACCOUNT NUMBER          NAME            LOAN        FIXED DEPOSIT
********************************************************************
1698                    Jess            No              No
2000                    Veena           No              No
  -
```

Display a specific account using account number

```
Enter account number:- 2000

ACCOUNT DETAILS
**************************

Account Number:-2000
Name of the account holder:-Veena
Address of the account holder:- India
Initial deposit:- 2000
Loan:- No
Fixed Deposit:- No
```

Display a specific account using account name

```
Enter the name of the account holder:- Jess

ACCOUNT DETAILS
**************************

Account Number:-1698
Name of the account holder:-Jess
Address of the account holder:- India
Initial deposit:- 9000
Loan:- No
Fixed Deposit:- No
```

Modify the name of a specific account

```
 MODIFY ACCOUNT

Enter the account number:- 2000

ACCOUNT DETAILS
***************************

Account Number:-2000
Name of the account holder:-Veena
Address of the account holder:- India
Initial deposit:- 2000
Loan:- No
Fixed Deposit:- No

MODIFY ACCOUNT DETAILS

****************************

What do you want to modify (name,address,balance,loan,fd)
name

Modify name of the account holder....
Enter the modified name of the account holder:- Riya_
```

```
ACCOUNT DETAILS SUCCESSFULLY MODIFIED


ACCOUNT DETAILS
***************************

Account Number:-2000
Name of the account holder:-Riya
Address of the account holder:- India
Initial deposit:- 2000
Loan:- No
Fixed Deposit:- No_
```

Modify the address of a specific account

```
 MODIFY ACCOUNT

Enter the account number:- 1698

ACCOUNT DETAILS
**************************

Account Number:-1698
Name of the account holder:-Jess
Address of the account holder:- India
Initial deposit:- 9000
Loan:- No
Fixed Deposit:- No

MODIFY ACCOUNT DETAILS

***************************

What do you want to modify (name,address,balance,loan,fd)
address

Modify address of the account holder
Enter the modified address of the account holder:- Brighton_

ACCOUNT DETAILS SUCCESSFULLY MODIFIED


ACCOUNT DETAILS
**************************

Account Number:-1698
Name of the account holder:-Jess
Address of the account holder:- Brighton
Initial deposit:- 9000
Loan:- No
Fixed Deposit:- No
```

Modifying the loan status of a specific account

```
 MODIFY ACCOUNT

Enter the account number:- 2000

ACCOUNT DETAILS
**************************

Account Number:-2000
Name of the account holder:-Riya
Address of the account holder:- India
Initial deposit:- 2000
Loan:- No
Fixed Deposit:- No

MODIFY ACCOUNT DETAILS

***************************

What do you want to modify (name,address,balance,loan,fd)
loan

Modify loan status of the account holder
Enter the modified loan status of the account holder:- Yes_

ACCOUNT DETAILS SUCCESSFULLY MODIFIED

ACCOUNT DETAILS
**************************

Account Number:-2000
Name of the account holder:-Riya
Address of the account holder:- India
Initial deposit:- 2000
Loan:- Yes
Fixed Deposit:- No_
```

Modifying the fixed deposit status of a specific account

```
 MODIFY ACCOUNT

Enter the account number:- 2000

ACCOUNT DETAILS
**************************

Account Number:-2000
Name of the account holder:-Riya
Address of the account holder:- India
Initial deposit:- 2000
Loan:- Yes
Fixed Deposit:- No

MODIFY ACCOUNT DETAILS

**************************

What do you want to modify (name,address,balance,loan,fd)
fd

Modify fixed deposit status of the account holder
Enter the modified fixed deposit status of the account holder:- Yes
ACCOUNT DETAILS SUCCESSFULLY MODIFIED


ACCOUNT DETAILS
**************************

Account Number:-2000
Name of the account holder:-Riya
Address of the account holder:- India
Initial deposit:- 2000
Loan:- Yes
Fixed Deposit:- Yes
```

Modifying the balance of an account

```
 MODIFY ACCOUNT

Enter the account number:- 2000

ACCOUNT DETAILS
***************************

Account Number:-2000
Name of the account holder:-Riya
Address of the account holder:- India
Initial deposit:- 2000
Loan:- Yes
Fixed Deposit:- Yes

MODIFY ACCOUNT DETAILS

***************************

What do you want to modify (name,address,balance,loan,fd)
balance

Modify balance of the account holder
Enter the modified balance of the account holder:- 4000

ACCOUNT DETAILS SUCCESSFULLY MODIFIED


ACCOUNT DETAILS
***********************

Account Number:-2000
Name of the account holder:-Riya
Address of the account holder:- India
Initial deposit:- 4000
Loan:- Yes
Fixed Deposit:- Yes_
```

```
                         BANK REPORT

*************************************************************
ACCOUNT NUMBER           NAME            ADDRESS      BALANCE
*************************************************************
1698                     Jess            Brighton        9000
2000                     Riya            India           4000
*************************************************************
TOTAL BANK BALANCE:-                                    13000
*************************************************************
```

```
                LOAN AND FIXED DEPOSIT RECORD
*************************************************************
ACCOUNT NUMBER           NAME               LOAN    FIXED DEPOSIT
*************************************************************
1698                     Jess               No          No
2000                     Riya               Yes         Yes

_
```

Delete an account

```
 DELETE AN ACCOUNT

Enter the account number:- 2000


ACCOUNT SUCCESSFULLY DELETED_
```

Deposit money

```
DEPOSIT MONEY


Enter the account number:- 1698

Your current account balance is:-  9000
How much do you want to deposit:-  3000
Your new current account balance is:- 12000

        Money deposited successfully!!!
```

Withdraw money

```
WITHDRAW MONEY


Enter the account number:- 1698

Your current account balance is:-  12000
How much do you want to withdraw:-  2000
Your new current account balance is:- 10000

          Money withdrawed successfully!!!_
```

Create a fixed deposit

```
CREATE A FIXED DEPOSIT..
*********************************
The Fixed Deposit Account is an account for customers who have a lump sum of
funds or funds not required immediately and who are looking for a consistently g
ood and assured return on their money.

Enter the account number:- 1698

Enter the amount to deposited in the FD
( Be sure that you have enough money in your current account):-
 2000_
```

```
TYPES OF FIXED DEPOSIT
***************************
1.Monthly
2.Quaterly
3.Half Yearly
4.Yearly
Enter the number of your preference:-(1-4) 1_
```

```
********************************************************************
No.    Time period     Normal Interest rate      For Senior Citizens
********************************************************************
1. Less than one year      5% interest              5.5% interest

2. Between 1-4 years       7% interest              7.5% interest

3. Between 4-7 years       9% interest              9.5% interest

4. More than 7 years       9.5% interest            10% interest


Enter your choice:- 1_


Enter your age:-34

Enter the exact time period:-9


How have you specified the time period??
1.Days
2.Months
3.Years

Enter the number of your preference:-(1-3):-  2_


Type of interest
******************
1.Simple
2.Compound
Enter the number of your preference:-(1-2):- 1
```

```
You have chosen to deposit for less than one year at the rate of 5%

Also you have chosen to renew your fixed deposit every Month

YOUR NEW BALANCE IN YOUR FIXED DEPOSIT IS 2900_
```

```
                LOAN AND FIXED DEPOSIT RECORD
********************************************************************
ACCOUNT NUMBER         NAME          LOAN       FIXED DEPOSIT
********************************************************************
1698                   Jess          No         Yes

_
```

```
CREATE A FIXED DEPOSIT..
*********************************
The Fixed Deposit Account is an account for customers who have a lump sum of
funds or funds not required immediately and who are looking for a consistently g
ood and assured return on their money.

Enter the account number:- 1698_
```

```
***********************************************************************
No.     Time period     Normal Interest rate     For Senior Citizens
***********************************************************************
1. Less than one year          5% interest              5.5% interest

2. Between 1-4 years            7% interest              7.5% interest

3. Between 4-7 years            9% interest              9.5% interest

4. More than 7 years          9.5% interest             10% interest


Enter your choice:- 2


Enter your age:-62

Enter the exact time period:-2
```

```
How have you specified the time period??
1.Days
2.Months
3.Years

Enter the number of your preference:-(1-3):-   3



Type of interest
********************
1.Simple
2.Compound
Enter the number of your preference:-(1-2):- 2_
```

```
You have chosen to deposit for Between 1-4 years
Since you are a senior citizen, our bank is happy to tell you that you will
be getting an extra 0.5% interest according to our bank policy that is 7.5%
Also you have chosen to renew your fixed deposit every Quater

YOUR NEW BALANCE IN YOUR FIXED DEPOSIT IS 1155.625
```

```
                 LOAN AND FIXED DEPOSIT RECORD
****************************************************************
ACCOUNT NUMBER          NAME            LOAN        FIXED DEPOSIT
****************************************************************
1698                    Jess            No              Yes
```

Apply for loan

```
                              LOAN..

No matter what your needs and aspiration,our financing packages
and offerings will help you and provide you with the necessary
support to get there

Enter your account number:- 1698


                    TYPES OF LOANS
        ********************************


1.Personal loan against current account balance
2.Car loan against current account balance
3.Educational loan against current account balance
4. Medical loan against current account balance
5.Mortgage loan against current account balance


Please Enter the number of your preference:- 1
```

```
                    PERSONAL LOAN
You have selected personal loan.
Follow us through the following procedures
and you are one step closer to achieving your desire

As per our bank policy, we are providing you with an affordabe 4% interest

Enter the loan amount:- 2000

Enter the time period:- 4

Enter the number of installments: -4_
```

```
                         LOAN SCHEDULE...
************************************************************
 No.         Installment          Balance          Interest
************************************************************
 1              580                1740                4%
 2              580                1160                4%
 3              580                580                 4%
 4              580                0                   4%
************************************************************

Your account balance after repaying the loan is 7680_
```

```
              LOAN AND FIXED DEPOSIT RECORD
************************************************************
ACCOUNT NUMBER          NAME          LOAN      FIXED DEPOSIT
************************************************************
1698                    Jess          Yes           Yes
```

(Please note that balance means the balance amount to be paid after an installment)

Result:- The Program has been executed successfully

Conclusion:- Our motive to design a system which was intended on managing all the accounts in the bank, their deposits and their withdrawals was successfully created. The main objective of our Banking system was to add, modify, delete accounts and also keep track of all the activities such as loans, fixed deposits etc… associated with it and this also was successfully incorporated into the program
The Banking System that we have created is clean user-friendly and multifunctional. It gives clear cut instructions for everything to ease the usage of the system by the user. The system provides a safe and secure transaction and also faster performance. The development of this application includes a number of fields such that user feels comfortable.

Bibliography:-

  ➢ Computer Science with C++ (CBSE Class XII Textbook)
  ➢ www.google.com
  ➢ For reference on how banks work:- www.qnb.com