//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// HEADER FILE USED IN PROJECT

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#include<iostream>

#include<fstream>

#include<cctype>

#include<iomanip>

using namespace std;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// CLASS USED IN PROJECT

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class account

{

int acno;

char name[50];

int deposit;

char type;

public:

void create\_account(); //function to get data from user

void show\_account() const; //function to show data on screen

void modify(); //function to add new data

void dep(int); //function to accept amount and add to balance amount

void draw(int); //function to accept amount and subtract from balance amount

void report() const; //function to show data in tabular format

int retacno() const; //function to return account number

int retdeposit() const; //function to return balance amount

char rettype() const; //function to return type of account

}; //class ends here

void account::create\_account()

{

cout<<"\nEnter The account No. :";

cin>>acno;

cout<<"\n\nEnter The Name of The account Holder : ";

cin.ignore();

cin.getline(name,50);

cout<<"\nEnter Type of The account (C/S) : ";

cin>>type;

type=toupper(type);

cout<<"\nEnter The Initial amount(>=500 for Saving and >=1000 for current ) : ";

cin>>deposit;

cout<<"\n\n\nAccount Successfully Created!..";

}

void account::show\_account() const

{

cout<<"\nAccount No. : "<<acno;

cout<<"\nAccount Holder Name : ";

cout<<name;

cout<<"\nType of Account : "<<type;

cout<<"\nBalance amount : "<<deposit;

}

void account::modify()

{

cout<<"\nAccount No. : "<<acno;

cout<<"\nModify Account Holder Name : ";

cin.ignore();

cin.getline(name,50);

cout<<"\nModify Type of Account : ";

cin>>type;

type=toupper(type);

cout<<"\nModify Balance amount : ";

cin>>deposit;

}

void account::dep(int x)

{

deposit+=x;

}

void account::draw(int x)

{

deposit-=x;

}

// listing of all accounts

void account::report() const

{

cout<<" "<<acno<<setw(10)<<" "<<name<<setw(10)<<" "<<type<<setw(6)<<" "<<deposit<<endl;

}

int account::retacno() const

{

return acno;

}

int account::retdeposit() const

{

return deposit;

}

char account::rettype() const

{

return type;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// function declaration

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void write\_account(); //function to write record in binary file

void display\_sp(int); //function to display account details given by user

void modify\_account(int); //function to modify record of file

void delete\_account(int); //function to delete record of file

void display\_all(); //function to display all account details

void deposit\_withdraw(int, int); // function to desposit/withdraw amount for given account

void intro(); //introductory screen function

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THE MAIN FUNCTION OF PROGRAM

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int main()

{

char ch;

int num;

intro();

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. CLOSE AN ACCOUNT";

cout<<"\n\n\t07. MODIFY AN ACCOUNT";

cout<<"\n\n\t08. EXIT";

cout<<"\n\n\tSelect Your Option (1-8) ";

cin>>ch;

system("cls");

switch(ch)

{

case '1':

write\_account();

break;

case '2':

cout<<"\n\n\tEnter The account No. : "; cin>>num;

deposit\_withdraw(num, 1);

break;

case '3':

cout<<"\n\n\tEnter The account No. : "; cin>>num;

deposit\_withdraw(num, 2);

break;

case '4':

cout<<"\n\n\tEnter The account No. : "; cin>>num;

display\_sp(num);

break;

case '5':

display\_all();

break;

case '6':

cout<<"\n\n\tEnter The account No. : "; cin>>num;

delete\_account(num);

break;

case '7':

cout<<"\n\n\tEnter The account No. : "; cin>>num;

modify\_account(num);

break;

case '8':

// cout<<"\n\n\tThanks for using Bank Managemnt System";

cout<<"\n\n\tThanks for using OMPPEAK BANK";

break;

default :cout<<"\a";

}

cin.ignore();

cin.get();

}while(ch!='8');

return 0;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// function to write in file

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void write\_account()

{

account ac;

ofstream outFile;

outFile.open("account.dat",ios::binary|ios::app);

ac.create\_account();

outFile.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

outFile.close();

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// function to read specific record from file

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void display\_sp(int n)

{

account ac;

bool flag=false;

ifstream inFile;

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

if(!inFile)

{

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

return;

}

cout<<"\nBALANCE DETAILS\n";

while(inFile.read(reinterpret\_cast<char \*> (&ac), sizeof(account)))

{

if(ac.retacno()==n)

{

ac.show\_account();

flag=true;

}

}

inFile.close();

if(flag==false)

cout<<"\n\nAccount Number does not exist";

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// function to modify record of file

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void modify\_account(int n)

{

bool found=false;

account ac;

fstream File;

File.open("account.dat",ios::binary|ios::in|ios::out);

if(!File)

{

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

return;

}

while(!File.eof() && found==false)

{

File.read(reinterpret\_cast<char \*> (&ac), sizeof(account));

if(ac.retacno()==n)

{

ac.show\_account();

cout<<"\n\nEnter The New Details of Account"<<endl;

ac.modify();

int pos=(-1)\*static\_cast<int>(sizeof(account));

File.seekp(pos,ios::cur);

File.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

cout<<"\n\n\t Record Updated";

found=true;

}

}

File.close();

if(found==false)

cout<<"\n\n Record Not Found ";

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// function to delete record of file

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void delete\_account(int n)

{

account ac;

ifstream inFile;

ofstream outFile;

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

if(!inFile)

{

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

return;

}

outFile.open("Temp.dat",ios::binary);

inFile.seekg(0,ios::beg);

while(inFile.read(reinterpret\_cast<char \*> (&ac), sizeof(account)))

{

if(ac.retacno()!=n)

{

outFile.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

}

}

inFile.close();

outFile.close();

remove("account.dat");

rename("Temp.dat","account.dat");

cout<<"\n\n\tRecord Deleted ..";

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// function to display all accounts deposit list

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void display\_all()

{

account ac;

ifstream inFile;

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

if(!inFile)

{

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

return;

}

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

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

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

cout<<" A/C NO. NAME TYPE BALANCE\n";

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

while(inFile.read(reinterpret\_cast<char \*> (&ac), sizeof(account)))

{

ac.report();

}

inFile.close();

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// function to deposit and withdraw amounts

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void deposit\_withdraw(int n, int option)

{

int amt;

bool found=false;

account ac;

fstream File;

File.open("account.dat", ios::binary|ios::in|ios::out);

if(!File)

{

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

return;

}

while(!File.eof() && found==false)

{

File.read(reinterpret\_cast<char \*> (&ac), sizeof(account));

if(ac.retacno()==n)

{

ac.show\_account();

if(option==1)

{

cout<<"\n\n\tTO DEPOSITE AMOUNT ";

cout<<"\n\nEnter The amount to be deposited";

cin>>amt;

ac.dep(amt);

}

if(option==2)

{

cout<<"\n\n\tTO WITHDRAW AMOUNT ";

cout<<"\n\nEnter The amount to be withdraw";

cin>>amt;

int bal=ac.retdeposit()-amt;

if((bal<500 && ac.rettype()=='S') || (bal<1000 && ac.rettype()=='C'))

cout<<"Insufficient balance";

else

ac.draw(amt);

}

int pos=(-1)\*static\_cast<int>(sizeof(ac));

File.seekp(pos,ios::cur);

File.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

cout<<"\n\n\t Record Updated";

found=true;

}

}

File.close();

if(found==false)

cout<<"\n\n Record Not Found ";

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// INTRODUCTION FUNCTION

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void intro()

{

cout<<"\n\n\n\t BANK MANAGEMENT SYSTEM";

cout<<"\n\n\n\n\t MADE BY : ODEWAYE MAYOMI PETER";

cout<<"\n\n\n\n\t MATRIC NO : H/CTE/22/0674";

cout<<"\n\n\n\n\t SUPERVISOR : ENGR. NZUBE";

cout<<"\n\n\n\n\t SCHOOL : FEDERAL POLYTECHNIC, ILARO";

cin.get();

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// END OF PROJECT

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*