

PROGRAM:

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#include <iostream>
#include <fstream>
#include <cstring>
#include <string.h>
#include <iomanip>
#include <cstdio>
#include <conio.h>
#include <ctime>
#include <stdlib.h>
#include <sstream>

using namespace std;

template <typename T>
T stringTo(const string &str) {
    istringstream ss(str);
    T num;
    ss >> num;
    return num;
}

template <typename T>
string toString(T num) {
    ostringstream ss;
    ss << num;
    return ss.str();
}

int main_exit;

void fordelay(int);
void close(void);
int main();
void menu_e();
void employee();
void customer();
void menu_c();

class Bank
{
public:
    string account_number;
    string name;
    string dob;
    string age;
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    string date;
    string address;
    string phone;
    string doc;
    string depo;
    string acc_type;
    string password;
    string interest;
public:
    void read_data();
    void acc_write();
    void modify_account();
    void search_rec();
    void deposit_withdraw();
    void display_all();
    void transfer();
};

float inter(float t,float amount,int rate)
{
    float SI;
    SI=(rate*t*amount)/100.0;
    return (SI);
}

void Bank::read_data()
{
    int x,i=0;
    string acc_no;
    Retry:
    cout<<"\nEnter Account Number: ";
    cin>>account_number;
    ifstream is("Account_info.csv");
    do
    {
        getline(is,acc_no, ',');
        getline(is,password, '\n');
        if(acc_no == account_number)
        {
            cout<<"\nAccount No. Matches with Existing Account!";
            cout<<"\n1. Try Again!\n2. Login To Account";
            cin>>x;
            if(x == 1)
                goto Retry;
            else
                customer();
        }
    }
    break;
}

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}while(is.good());
fflush(stdin);
cout<<"\nEnter Name: ";
getline(cin,name);
cout<<"\nEnter the  of birth(mm/dd/yyyy):";
fflush(stdin);
cin>>dob;
cout<<"\nEnter the age:";
cin>>age;
cout<<"\nEnter the address:";
fflush(stdin);
getline(cin,address);
cout<<"\nEnter the phone number: ";
fflush(stdin);
cin>>phone;
cout<<"\nYou want to deposit amount:\n\t1.Yes\n\t2.No\n:";
cin>>x;
if(x == 1)
{
    cout<<"\nEnter the amount to deposit: Rs ";
    cin>>depo;
}
else
{
    depo = toString<int>(0);
}
cout<<"\nType of account:\n\t#Saving\n\t#Current\n\n\tEnter your choice:";
fflush(stdin);
cin>>acc_type;
cout<<endl;
time_t now = time(0);
string dt = ctime(&now);
cout<<"\nDate and Time of Account Creation:" << dt << endl;
date = dt;
struct tm *ltm = localtime(&now);
doc = toString<int>(ltm->tm_mday);
doc = doc.substr(0, doc.size()-1);
interest = toString<int>(i++);
cout<<"\nEnter Password For Your Account:";
cin>>password;
printf("\nAccount created successfully!");
login_try:
cout<<"\n\nEnter 1. For Main Menu\n\t2. For Previous Menu and 0 to Exit:";
scanf("%d",&main_exit);
if (main_exit==1)
{
    system("cls");
    main();
}

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    }
    else if (main_exit==0)
    {
        system("cls");
        close();
    }
    else if (main_exit == 2)
    {
        system("cls");
        menu_c();
    }
    else
    {
        printf("\nInvalid!");
        fordelay(1000000000);
        system("cls");
        goto login_try;
    }
}

void Bank::acc_write()
{
    ofstream MyFile1, MyFile2;
    read_data();
    MyFile1.open("Bank_Record.csv", ios::out|ios::app);
    MyFile1<<account_number<<","<<name<<","<<dob<<","
        <<age<<","<<address<<","<<phone<<","<<depo
        <<","<<acc_type<<","<<date<<","<<doc<<","<<interest<<"\n";
    MyFile1.close();
    MyFile2.open("Account_info.csv", ios::out|ios::app);
    MyFile2<<account_number<<","<<password<<","<<"\n";
    MyFile2.close();
}

void Bank::modify_account()
{
    Bank ac;
    int test = 0;
    string acc_no;
    cout<<"For Verification:\n";
    cout<<"Enter the Account Number again:";
    cin>>acc_no;
    ifstream is("Bank_Record.csv");
    do
    {
        getline(is,account_number, ',');
        getline(is, name, ',');
        getline(is, dob, ',');
        getline(is, age, ',');
    }

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getline(is, address, ',');
getline(is, phone, ',');
getline(is, depo, ',');
getline(is, acc_type, ',');
getline(is, date, ',');
getline(is, doc, ',');
getline(is, interest, '\n');
if(acc_no == account_number)
{
    test = 1;
    cout<<"\nAccount NO.:"<<account_number<<endl;
    cout<<"\nName:" <<name<<endl;
    cout<<"\nDOB:" <<dob<<endl;
    cout<<"\nAge:" <<age<<endl;
    cout<<"\nAddress: "<<address<<endl;
    cout<<"\nPhone number:"<<phone<<endl;
    cout<<"\nType Of Account:"<<acc_type<<endl;
    cout<<"\nDate of Account creation:"<<date<<endl;
    cout<<"\nAmount deposited:"<<depo<<endl;
    break;
}
}while (is.good());
is.close();
string x, y, z;
int choice;
int opt;
if(test == 1)
{
    ifstream file ("Bank_Record.csv");
    ofstream ofile ("temp.csv");
    do{
        cout<<"\n\n\n\t\t1.Update Name\n";
        cout<<"\t\t2.Update dob Of Birth\n";
        cout<<"\t\t3.Update Age\n";
        cout<<"\t\t4.Update Address\n";
        cout<<"\t\t5.Update Phone No.\n";
        cin>>choice;
        switch(choice)
        {
            case 1:
                cout<<"\t\tUpdate Name\n\n";
                cout<<"Enter Old Name: ";
                cin>>y;
                cout<<"Enter New Name: ";
                cin>>z;
                while (!file.eof())
                {
                    getline(file,x,',');

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        if (x == y)
            ofile << z << ",";
        else
            ofile << x << ",";
    }
    break;
case 2:
    cout<<"\t\tUpdate dob Of Birth\n\n";
    cout<<"Enter Old dob Of Birth(mm/dd/yyyy): ";
    cin>>y;
    cout<<"Enter New dob Of Birth(mm/dd/yyyy): ";
    cin>>z;
    while (!file.eof())
    {
        getline(file,x,',');
        if (x == y)
            ofile << z << ",";
        else
            ofile << x << ",";
    }
    break;
case 3:
    cout<<"\t\tUpdate Age\n\n";
    cout<<"Enter Old Age: ";
    cin>>y;
    cout<<"Enter New Age: ";
    cin>>z;
    while (!file.eof())
    {
        getline(file,x,',');
        if (x == y)
            ofile << z << ",";
        else
            ofile << x << ",";
    }
    break;
case 4:
    cout<<"\t\tUpdate Address\n\n";
    cout<<"Enter Old Address: ";
    cin>>y;
    cout<<"Enter New Address: ";
    cin>>z;
    while (!file.eof())
    {
        getline(file,x,',');
        if (x == y)
            ofile << z << ",";
        else

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        ofile << x << ",";
    }
    break;
case 5:
    cout<<"\t\tUpdate Phone No.\n\n";
    cout<<"Enter Old Phone No. : ";
    cin>>y;
    cout<<"Enter New Phone No. : ";
    cin>>z;
    while (!file.eof())
    {
        getline(file,x,',');
        if (x == y)
            ofile << z <<",";
        else
            ofile << x <<",";
    }
    break;
default: cout<<"Invalid Input";
}

remove("Bank_Record.csv");
rename("temp.csv","Bank_Record.csv");
file.seekg(0, ios::beg);
ofile.seekp(0, ios::beg);
cout<<"\n\n\t\tDo You Want Update Any Other Field : "
    <<"\n\t\t1: YES\n\t\t2: NO\n";
    cin>>opt;
}while(opt!=2);
file.close();
ofile.close();
}
else
{
    cout<<"\nAccount Doesn't Exist";
}
login_try:
cout<<"\nEnter 1. For Main Menu\n\t2. For Previous Menu and"
    <<" 0 to Exit:";
scanf("%d",&main_exit);
if (main_exit==1)
{
    system("cls");
    main();
}
else if (main_exit==0)
{
    system("cls");

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        close();
    }
    else if (main_exit == 2)
    {
        system("cls");
        menu_c();
    }
    else
    {
        printf("\nInvalid!");
        fordelay(1000000000);
        system("cls");
        goto login_try;
    }
}

void Bank::search_rec()
{
    int test=0,rate;
    int choice, date1;
    float t;
    string intrst, x, y;
    int amount, b;
    string acc_no, name_s;
    ifstream is("Bank_Record.csv");

    cout<<"Do you want to check by\n1.Account no\n2.Name"
         <<"\nEnter your choice:";
    cin>>choice;
    if (choice==1)
    {
        cout<<"Enter the account number:";
        cin>>acc_no;
        do
        {
            getline(is,account_number, ',');
            getline(is, name, ',');
            getline(is, dob, ',');
            getline(is, age, ',');
            getline(is, address, ',');
            getline(is, phone, ',');
            getline(is, depo, ',');
            getline(is, acc_type, ',');
            getline(is, date, ',');
            getline(is, doc,',');
            getline(is, interest,'\n');
            amount = atoi(depo.c_str());
            if(acc_no == account_number)

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{
    test = 1; system("cls");
    cout<<"\nAccount NO.:"<<account_number<<endl;
    cout<<"\nName:" <<name<<endl;
    cout<<"\nDOB:" <<dob<<endl;
    cout<<"\nAge:" <<age<<endl;
    cout<<"\nAddress: "<<address<<endl;
    cout<<"\nPhone number:"<<phone<<endl;
    cout<<"\nType Of Account:"<<acc_type<<endl;
    cout<<"\nDate of Account creation:"<<date<<endl;
    cout<<"\nAmount deposited:"<<depo<<endl;

    ifstream file ( "Bank_Record.csv" );
    ofstream ofile ( "temp.csv" );

    if(acc_type == "Saving")
    {
        time_t now = time(0);
        struct tm *ltm = localtime(&now);
        date1 = ltm->tm_mday;
        if(date1 != atoi(doc.c_str()))
        {
            t = date1 - atoi(doc.c_str());
            rate=15;
            intrst=toString<float>(inter(t,amount,rate));

            cout<<"\n\nYou will get Rs " <<intrst
                <<" as interest";
            file.clear();
            while (!file.eof())
            {
                getline(file,x,',');
                if (x == interest)
                    ofile << intrst <<",";
                else if(x == depo)
                {
                    y=(atoi(depo.c_str())+atoi(intrst.c_str()));
                    ofile << y << ",";
                }
                else
                    ofile << x <<",";
            }
        }
        else
        {
            cout<<"\n\nYou will get Rs 0 as interest"
                <<" for today...";
        }
    }
}

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        break;
    }
    else if(acc_type == "Current")
    {
        time_t now = time(0);
        struct tm *ltm = localtime(&now);
        date1 = ltm->tm_mday;
        if(date1 != atoi(doc.c_str()))
        {
            t = date1 - atoi(doc.c_str());
            rate=15;
            intrst=toString<float>(inter(t,amount,rate));

            cout<<"\n\nYou will get Rs " <<intrst
                <<" as interest";
            file.clear();
            while (!file.eof())
            {
                getline(file,x,',');
                if (x == interest)
                    ofile << intrst <<",";
                else if(x == depo)
                {
                    y=(atoi(depo.c_str())+atoi(intrst.c_str()));
                    ofile << y << ",";
                }
                else
                    ofile << x <<",";
            }
        }
        else
        {
            cout<<"\n\nYou will get Rs 0 as interest"
                <<" for today...";
        }
        break;
    }
}
}while (is.good());
}
else if (choice==2)
{
    cout<<"Enter the Name of Account Holder:";
    cin>>name_s;
    do
    {
        getline(is,account_number, ',');
        getline(is, name, ',');
    }

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getline(is, dob, ',');
getline(is, age, ',');
getline(is, address, ',');
getline(is, phone, ',');
getline(is, depo, ',');
getline(is, acc_type, ',');
getline(is, date, ',');
getline(is, doc, ',');
getline(is, interest, '\n');
amount = atoi(depo.c_str());
if(name_s == name)
{
    test = 1; system("cls");
    cout<<"\nAccount NO.:"<<account_number<<endl;
    cout<<"\nName:" <<name<<endl;
    cout<<"\nDOB:" <<dob<<endl;
    cout<<"\nAge:" <<age<<endl;
    cout<<"\nAddress: "<<address<<endl;
    cout<<"\nPhone number:"<<phone<<endl;
    cout<<"\nType Of Account:"<<acc_type<<endl;
    cout<<"\nDate of Account creation:"<<date<<endl;
    cout<<"\nAmount deposited:"<<depo<<endl;

    ifstream file ( "Bank_Record.csv" );
    ofstream ofile ( "temp.csv" );

    if(acc_type == "Saving")
    {
        time_t now = time(0);
        struct tm *ltm = localtime(&now);
        date1 = ltm->tm_mday;
        if(date1 != atoi(doc.c_str()))
        {
            t = date1 - atoi(doc.c_str());
            rate=15;
            intrst=toString<float>(inter(t,amount,rate));

            cout<<"\n\nYou will get Rs " <<intrst
                <<" as interest";
            file.clear();
            while (!file.eof())
            {
                getline(file,x,',');
                if (x == interest)
                    ofile << intrst <<" ";
                else if(x == depo)
                {
                    y=(atoi(depo.c_str())+atoi(intrst.c_str()));

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        ofile << y << ",";
    }
    else
        ofile << x << ",";
    }
}
else
{
    cout<<"\n\nYou will get Rs 0 as interest "
        <<"for today...";
}
break;
}
else if(acc_type == "Current")
{
    time_t now = time(0);
    struct tm *ltm = localtime(&now);
    date1 = ltm->tm_mday;
    if(date1 != atoi(doc.c_str()))
    {
        t = date1 - atoi(doc.c_str());
        rate=15;
        intrst=toString<float>(inter(t,amount,rate));

        cout<<"\n\nYou will get Rs " <<intrst
            <<" as interest";
        file.clear();
        while (!file.eof())
        {
            getline(file,x,',');
            if (x == interest)
                ofile << intrst << ",";
            else if(x == depo)
            {
                y=(atoi(depo.c_str())+atoi(intrst.c_str()));
                ofile << y << ",";
            }
            else
                ofile << x << ",";
        }
    }
    else
    {
        cout<<"\n\nYou will get Rs 0 as interest for today..."
;

    }
    break;
}
}

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        }
    }while (is.good());
}
if(test == 0)
{
    cout<<"\n\n\t\tAccount doesn't Exist!";
}
remove("Bank_Record.csv");
rename("temp.csv", "Bank_Record.csv");
is.close();
login_try:
cout<<"\nEnter 1. For Main Menu\n\t2. For Customer Menu\n\t"
    <<"3. For Employee Menu and 0 to Exit:";
scanf("%d",&main_exit);
if (main_exit==1)
{
    system("cls");
    main();
}
else if (main_exit==0)
{
    system("cls");
    close();
}
else if (main_exit == 2)
{
    system("cls");
    menu_c();
}
else if(main_exit == 3)
{
    system("cls");
    employee();
}
else
{
    printf("\nInvalid!");
    fordelay(1000000000);
    system("cls");
    goto login_try;
}
}

void Bank::deposit_withdraw()
{
    int choice,test=0,amt,amount;
    string acc_no, y, x;
    ifstream file ("Bank_Record.csv" );

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ofstream ofile ("temp.csv" );
Bank ac;
cout<<"Enter the account number:";
cin>>acc_no;
do
{
    getline(file,account_number, ',');
    getline(file, name, ',');
    getline(file, dob, ',');
    getline(file, age, ',');
    getline(file, address, ',');
    getline(file, phone, ',');
    getline(file, depo, ',');
    getline(file, acc_type, ',');
    getline(file, date, ',');
    getline(file, doc,',');
    getline(file, interest, '\n');
    amount = atoi(depo.c_str());
    if(acc_no == account_number)
    {
        test = 1;
        cout<<"\nAccount No.:"<<account_number<<endl;
        cout<<"\nName:" <<name<<endl;
        cout<<"\nDOB:" <<dob<<endl;
        cout<<"\nAge:" <<age<<endl;
        cout<<"\nAddress: "<<address<<endl;
        cout<<"\nPhone number:"<<phone<<endl;
        cout<<"\nDate of Creation: "<<date<<endl;
        cout<<"\nType Of Account:"<<acc_type<<endl;
        cout<<"\nBalance:"<<depo<<endl;
        test=1;
        cout<<"\n\nDo you want to\n1.Deposit\n2.Withdraw?\n\n"
        <<"Enter your choice(1 for deposit and 2 for withdraw):";
        cin>>choice;
        if (choice==1)
        {
            cout<<"Enter the amount you want to deposit: ";
            cin>>amt;
            file.seekg(0, ios::beg);
            amt = atoi(depo.c_str()) + amt;
            y = toString<int>(amt);
            cout<<"\n\tBalance : "<<y;
            int i=1;
            while (file.good())
            {
                getline(file,x,',');
                if (x == depo)
                {

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        ofile << y <<",";
    }
    else
    {
        ofile << x <<",";
    }
}
printf("\n\nDeposited successfully!");
}
else
{
    cout<<"Enter the amount you want to Withdraw: ";
    cin>>amt;
    file.seekg(0, ios::beg);
    if(amt > atoi(depo.c_str()))
        cout<<"Not Enough Balance\n";
    else
    {
        amt = atoi(depo.c_str()) - amt;
        y = toString<int>(amt);
        cout<<"\n\tBalance : "<<y;
        while (file.good())
        {
            getline(file,x,',');
            if (x == depo)
                ofile << y <<",";
            else
                ofile << x <<",";
        }
        printf("\n\nWithdrawn successfully!");
    }
}
}
}while (file.good());
file.close();
ofile.close();
remove("Bank_Record.csv");
rename("temp.csv", "Bank_Record.csv");

if(test==0)
{
    cout<<"\n\nRecord not found!!";
    login_try:
    cout<<"\nEnter 1. For Main Menu\n\t2. For Previous Menu and"
        <<" 0 to try again:";
    scanf("%d",&main_exit);
    if (main_exit==1)
    {

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        system("cls");
        main();
    }
    else if (main_exit==0)
    {
        system("cls");
        ac.deposit_withdraw();
    }
    else if (main_exit == 2)
    {
        system("cls");
        employee();
    }
    else
    {
        printf("\nInvalid!");
        fordelay(1000000000);
        system("cls");
        goto login_try;
    }
}
else
{
    login_try1:
    cout<<"\nEnter 1. For Main Menu\n\t2. For Previous Menu "
        <<"and 0 to Exit:";
    scanf("%d",&main_exit);
    if (main_exit==1)
    {
        system("cls");
        main();
    }
    else if (main_exit==0)
    {
        system("cls");
        close();
    }
    else if (main_exit == 2)
    {
        system("cls");
        menu_c();
    }
    else
    {
        printf("\nInvalid!");
        fordelay(1000000000);
        system("cls");
        goto login_try1;
    }
}

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    }
}

void Bank::display_all()
{
    int amount;
    cout<<"\n\n\t\tACCOUNT HOLDER LIST\n\n";
    cout<<"=====
    <<"=====
    <<"=====\\n";
    cout<<"  Account No.\t\tName\t\tType\t\tBalance\t\tAddress"
    <<"\t\tPhone No.\t\tCreation Date\\n";
    cout<<"=====
    <<"=====
    <<"=====\\n";
    ifstream is("Bank_record.csv");
    int i=1,sz=0,sz1=0;
    char c;
    is.seekg(0,ios::end);
    sz=is.tellg();
    //cout<<sz<<endl;
    is.seekg(0,ios::beg);
    while (!is.eof())
    {
        cout<<i<<" . ";
        i++;
        getline(is,account_number, ',');
        getline(is, name, ',');
        getline(is, dob, ',');
        getline(is, age, ',');
        getline(is, address, ',');
        getline(is, phone, ',');
        getline(is, depo, ',');
        getline(is, acc_type, ',');
        getline(is, date, ',');
        getline(is, doc,',');
        getline(is, interest, '\\n');
        amount = atoi(depo.c_str());
        sz1=is.tellg();
        //cout<<sz1<<" ";
        cout<<account_number<<"\\t\\t"<<name<<"\\t\\t"<<acc_type
            <<"\\t\\t"<<amount<<"\\t\\t"<<address<<"\\t\\t"
            <<phone<<"\\t\\t"<<date<<endl;
        if(sz == (sz1))
            break;
    }
}

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login_try:
cout<<"\nEnter 1. For Main Menu\n\t2. For Previous Menu "
    <<"and 0 to Exit:";
scanf("%d",&main_exit);
if (main_exit==1)
{
    system("cls");
    main();
}
else if (main_exit==0)
{
    system("cls");
    close();
}
else if (main_exit == 2)
{
    system("cls");
    menu_e();
}
else
{
    printf("\nInvalid!");
    fordelay(1000000000);
    system("cls");
    goto login_try;
}
}

void Bank::transfer()
{
    int amount,amt, test = 0;
    string acc_no, y, x;
    {
        ifstream file ("Bank_Record.csv" );
        ofstream ofile ("temp.csv" );
        Bank ac;
        cout<<"Enter Your account number:";
        cin>>acc_no;
        do
        {
            getline(file,account_number, ',');
            getline(file, name, ',');
            getline(file, dob, ',');
            getline(file, age, ',');
            getline(file, address, ',');
            getline(file, phone, ',');
            getline(file, depo, ',');
            getline(file, acc_type, ',');

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getline(file, date, ',');
getline(file, doc, ',');
getline(file, interest, '\n');
if(acc_no == account_number)
{
    test = 1;
    cout<<"Account No.:"<<account_number<<endl;
    cout<<"Name:" <<name<<endl;
    cout<<"DOB:" <<dob<<endl;
    cout<<"Age:" <<age<<endl;
    cout<<"Address: "<<address<<endl;
    cout<<"Phone number:"<<phone<<endl;
    cout<<"Type Of Account:"<<acc_type<<endl;
    cout<<"Balance:"<<depo<<endl;

    cout<<"\nEnter the amount you want to transfer: ";
    cin>>amt;
    file.seekg(0, ios::beg);
    if(amt > atoi(depo.c_str()))
        cout<<"Not Enough Balance\n";
    else
    {
        amount = atoi(depo.c_str()) - amt;
        y = toString<int> (amount);
        cout<<"\n\tBalance : "<<y;
        while (file.good())
        {
            getline(file,x,',');
            if (x == depo)
            {
                ofile << y <<",";
            }
            else
            {
                ofile << x <<",";
            }
        }
        break;
    }
}while (file.good());

file.close();
ofile.close();
remove("Bank_Record.csv");
rename("temp.csv", "Bank_Record.csv");
}
ifstream file ("Bank_Record.csv" );

```

```

ofstream ofile ("temp.csv" );
if(test == 0)
{
    cout<<"\n\n\t\tAccount doesn't Exist!";
}
cout<<"\nEnter account number where to transfer:";
cin>>acc_no;
test = 0;
file.seekg(0, ios::beg);
do
{
    getline(file,account_number, ',');
    getline(file, name, ',');
    getline(file, dob, ',');
    getline(file, age, ',');
    getline(file, address, ',');
    getline(file, phone, ',');
    getline(file, depo, ',');
    getline(file, acc_type, ',');
    if(acc_no == account_number)
    {
        test = 1;
        cout<<"Account No.:"<<account_number<<endl;
        cout<<"Name:" <<name<<endl;
        amt = atoi(depo.c_str()) + amt;
        y = toString<int>(amt);
        file.seekg(0, ios::beg);
        while (file.good())
        {
            getline(file,x,',');
            if (x == depo)
                ofile << y <<",";
            else
                ofile << x <<",";
        }
        cout<<"\n\tTransfer Successful!";
        break;
    }
}while (file.good());

file.close();
ofile.close();
remove("Bank_Record.csv");
rename("temp.csv", "Bank_Record.csv");
if(test == 0)
{
    cout<<"\n\n\t\tAccount doesn't Exist!";
}

```

```

login_try:
cout<<"\nEnter 1. For Main Menu\n\t2. For Previous Menu "
    <<"and 0 to Exit:";
scanf("%d",&main_exit);
if (main_exit==1)
{
    system("cls");
    main();
}
else if (main_exit==0)
{
    system("cls");
    close();
}
else if (main_exit == 2)
{
    system("cls");
    menu_c();
}
else
{
    printf("\nInvalid!");
    fordelay(1000000000);
    system("cls");
    goto login_try;
}
}

void fordelay(int j)
{
    int i,k;
    for(i=0;i<j;i++)
        k=i;
}

void close(void)
{
    printf("\n\n\n\nThis Program is Closed... Thank You");
}

void employee()
{
    char pass[10];
    char c;
    string s, name;
    int i=0;
    cout<<"\n\n\t\tFor Security Purpose:";
    cout<<"\n\n\t\tEnter the Login Emplpyoee Id:";

```

```

cin>>name;
cout<<"\n\n\t\tEnter the password to login:";
while(1)
{
    c=_getch();
    printf("*");
    s+=c;
    if(c=='\r')
    {
        break;
    }
}
s = s.substr(0, s.size()-1);
cout<<endl;
if(s == "1234" && (name == "Vinay" || name == "Kuber" || name == "Sarita"))
)
    {
        printf("\n\nAccess Granted!\nLOADING");
        for(i=0;i<=6;i++)
        {
            fordelay(100000000);
            printf(".");
        }

        system("cls");
        menu_e();
    }
else
{
    printf("\n\nIncorrect password or Emplpyoee Id!!");
    login_try:
    cout<<"\nEnter 1 to try again , 2 for Main Menu and"
        <<" 0 to Exit:";
    scanf("%d",&main_exit);
    if (main_exit==1)
    {
        system("cls");
        employee();
    }
    else if (main_exit==0)
    {
        system("cls");
        close();
    }
    else if (main_exit == 2)
    {
        system("cls");
        main();
    }
    else

```

```

        {
            printf("\nInvalid!");
            fordelay(1000000000);
            system("cls");
            goto login_try;
        }
    }
}

void menu_e()
{
    int choice;
    Bank B;
    menu:
    system("cls");
    cout<<"\n\n\t\t\tBANK RECORD SYSTEM";
    cout<<"\n\n\n\t\t\t\xB2\xB2\xB2\xB2\xB2\xB2\xB2 WELCOME "
        <<"TO THE MAIN MENU \xB2\xB2\xB2\xB2\xB2\xB2\xB2";
    cout<<"\n\n\t\t\tEmployee Menu";
    cout<<"\n\n\t\t1.Check the details of existing account\n";
    cout<<"\t\t2.Display All Account Holder Name\n";
    cout<<"\t\t3.Exit\n\n\n\n\n\t\t Enter your choice:";
    cin>>choice;
    system("cls");
    switch(choice)
    {
        case 1: B.search_rec();
                break;
        case 2: B.display_all();
                break;
        case 3: close();
                break;
        default :cout<<"Invalid Input!\n";
                 cout<<" Try Again\n";
                 goto menu;
    }
    login_try:
    cout<<"\nEnter 1 for Main Menu , 2 for Previous Menu and"
        <<" 0 to Exit:";
    scanf("%d",&main_exit);
    if (main_exit==1)
    {
        system("cls");
        main();
    }
    else if (main_exit==0)
    {
        system("cls");
    }
}

```

```

        close();
    }
    else if (main_exit == 2)
    {
        system("cls");
        employee();
    }
    else
    {
        printf("\nInvalid!");
        fordelay(1000000000);
        system("cls");
        goto login_try;
    }
}

void customer()
{
    char pass[10];
    char c;
    string s, name, acc_no, password;
    int i=0,x;
    system("cls");
    cout<<"\n\n\t\t\tMENU";
    cout<<"\n\t\t\t1. New Customer";
    cout<<"\n\t\t\t2. Existing Customer";
    cout<<"\n\t\t\tEnter Your Choice : ";
    cin>>x;
    if(x==1)
        menu_c();
    else
    {
        cout<<"\n\n\t\t\tFor Security Purpose:";
        cout<<"\n\n\t\t\tEnter the Login Customer Id:";
        cin>>name;
        cout<<"\n\n\t\t\tEnter the password to login:";
        while(1)
        {
            c=_getch();
            printf("*");
            s+=c;
            if(c=='\r')
            {
                break;
            }
        }
        s = s.substr(0, s.size()-1);
        cout<<endl;
    }
}

```



```

ifstream is("Account_info.csv");
do
{
    getline(is,acc_no, ',');
    getline(is,password, '\n');
    if(acc_no == name)
    {
        i = 1;
        if(password == s)
            printf("\n\nAccess Granted!\nLOADING");
        for(i=0;i<=6;i++)
        {
            fordelay(1000000000);
            printf(".");
        }

        system("cls");
        menu_c();
    }
}while(is.good());
if(i == 0)
{
    printf("\n\nWrong password or Customer Id!!");
    login_try:
    cout<<"\nEnter 1 to try again , 2 for Main Menu and"
        <<" 0 to Exit:";
    scanf("%d",&main_exit);
    if (main_exit==1)
    {
        system("cls");
        customer();
    }
    else if (main_exit==0)
    {
        system("cls");
        close();
    }
    else if (main_exit == 2)
    {
        system("cls");
        main();
    }
    else
    {
        printf("\nInvalid!");
        fordelay(1000000000);
        system("cls");
        goto login_try;
    }
}

```

```

    }
}

void menu_c(void)
{
    int choice;
    Bank B;
    menu:
    system("cls");
    cout<<"\n\n\t\t\tBANK RECORD SYSTEM";
    cout<<"\n\n\n\t\t\t\xB2\xB2\xB2\xB2\xB2\xB2\xB2 WELCOME"
        <<" TO THE MAIN MENU \xB2\xB2\xB2\xB2\xB2\xB2\xB2";
    cout<<"\n\n\t\t\t1.Create new account\n";
    cout<<"\t\t\t2.Update information of existing account\n";
    cout<<"\t\t\t3.For transactions\n";
    cout<<"\t\t\t4.Check the details of existing account\n";
    cout<<"\t\t\t5.For Transfer\n";
    cout<<"\t\t\t6.Exit\n\n\n\n\n\t\t\tEnter your choice:";
    cin>>choice;

    system("cls");
    switch(choice)
    {
        case 1:
            B.acc_write();
            break;
        case 2:
            B.modify_account();
            break;
        case 3:
            B.deposit_withdraw();
            break;
        case 4:
            B.search_rec();
            break;
        case 5:
            B.transfer();
            break;
        case 6:
            close();
            break;
    }
    login_try:
    cout<<"\nEnter 1 for Main Menu , 2 for Previous Menu and"
        <<" 0 to Exit:";
    scanf("%d",&main_exit);
    if (main_exit==1)

```

```

{
    system("cls");
    main();
}
else if (main_exit==0)
{
    system("cls");
    close();
}
else if (main_exit == 2)
{
    system("cls");
    employee();
}
else
{
    printf("\nInvalid!");
    fordelay(1000000000);
    system("cls");
    goto login_try;
}
}

int main()
{
    int ch, i;
    cout << "\n\n\n\n\n\t\t\t\t\tWelcome to our bank System";
    for(i=0;i<6;i++)
    {
        fordelay(1000000000);
        printf(".");
    }
    menu:
    system("cls");
    cout<<"\t\t\t\t\t VIDYALANKAR BANK  "<<endl;
    cout<<"\n\n\t\t\t\t\t MENU\n";
    cout<<"\n\t\t\t1. Employee ";
    cout<<"\n\t\t\t2. Customer ";
    cout<<"\n\t\t\t3. Exit ";
    cout<<"\n\t\t\tEnter Your Choice: ";
    cin>>ch;
    switch(ch)
    {
        case 1: employee();
                break;
        case 2: customer();
                break;
        case 3: close();
    }
}

```

```
                break;
            default :   cout<<"Invalid Input! Try Again...\n";
                        fordelay(1000000000);
                        goto menu;
        }
}
```

OUTPUT:

MAIN MENU

```
VIDYALANKAR BANK

MENU

1. Employee
2. Customer
3. Exit
Enter Your Choice: 
```

EMPLOYEE AUTHENTICATION

```
For Security Purpose:

Enter the Login Emplpyoee Id:Vinay

Enter the password to login:****
```

EMPLOYEE MENU

```
BANK RECORD SYSTEM

███ WELCOME TO THE MAIN MENU ███

Employee Menu
1.Check the details of existing account
2.Display All Account Holder Name
3.Exit

Enter your choice:█
```

EXISTING ACCOUNTS DETAILS

```
ACCOUNT HOLDER LIST

=====
Account No.      Name      Type      Balance      Address      Phone No.      Creation Date
=====
1. 111113        Kuber     Current    60000        Mumbai       8              Sat Oct 31 10:52:28 2020
2. 111112        Sarita    Saving     50000        Mumbai       7              Sat Oct 31 10:51:49 2020
3. 111111        Vinay     Saving     100000       Mumbai       9              Sat Oct 31 10:51:07 2020
4.               Saving    100000     Mumbai       9              Sat Oct 31 10:51:07 2020

Enter 1. For Main Menu
    2. For Previous Menu and 0 to Exit:█
```

CUSTOMER MENU

```
BANK RECORD SYSTEM

WELCOME TO THE MAIN MENU

1.Create new account
2.Update information of existing account
3.For transactions
4.Check the details of existing account
5.For Transfer
6.Exit

Enter your choice:
```

CREATION OF NEW ACCOUNT

```
Enter Account Number: 111114

Enter Name: Vinay

Enter the  of birth(mm/dd/yyyy):27/09/2002

Enter the age:18

Enter the address:Pune

Enter the phone number: 6

You want to deposit amount:
  1.Yes
  2.No
:1

Enter the amount to deposit: Rs 1000

Type of account:
  #Saving
  #Current

Enter your choice:Saving

Date and Time of Account Creation:Sat Nov 07 11:37:44 2020

Enter Password For Your Account:1234
```

DEPOSITING AMOUNT

```
Enter your choice(1 for deposit and 2 for withdraw):1
Enter the amount you want to deposit: 1000
```

```
Balance : 51000
```

```
Deposited successfully!
```

```
Enter 1. For Main Menu
```

```
2. For Previous Menu and 0 to Exit:
```

WITHDRAWING AMOUNT

```
Enter your choice(1 for deposit and 2 for withdraw):2
Enter the amount you want to Withdraw: 1000
```

```
Balance : 50000
```

```
Withdrawn successfully!
```

```
Enter 1. For Main Menu
```

```
2. For Previous Menu and 0 to Exit:
```

SAVING ACCOUNT DETAILS IN CSV FILE

```
You, a few seconds ago | 2 authors (You and others)
```

```
111113,Kuber,10/10/2020,18,Mumbai,8,60000,Current,Sat Oct 31 10:52:28 2020
,3,0
```

```
111112,Sarita,09/08/2002,18,Mumbai,7,50000,Saving,Sat Oct 31 10:51:49 2020
,3,0
```

```
111111,Vinay,27/09/2002,18,Mumbai,9,100000,Saving,Sat Oct 31 10:51:07 2020
,3,0
```

```
111114,Vinay,27/09/2002,18,Pune,6,1000,Saving,Sat Nov 07 11:37:44 2020
,,0
```

```
You, a few s
```

SAVING ACCOUNT PASSWORDS IN CSV FILE

```
You, a few seconds ago | 1 a
```

```
111113,111113,
```

```
111112,111112,
```

```
111111,11111,
```

```
111114,1234, Yo
```