

THE CODE:

```
#include <iostream>
#include <fstream> //FOR FILE HANDLING
#include <string>
#include <conio.h>
#include <stdio.h>
using namespace std;

//CLASS FOR THE DATAS OF USERS
class Data {
    public:
        int accNum;
        string lName;
        string fName;
        string bal;
};

//IO FILES
//ofstream outFile("data.txt",
std::ios_base::app);
//ifstream inFile ("data.txt",
std::ios_base::app);
//ofstream fileTemp
("datatemp.txt",std::ios_base::app);
//ifstream
accFile("accounts.txt",std::ios_base::app);
int choice;
//FUNCTIONS
void writeRec(); // TO WRITE THE RECORD
void readRec(); // READ THE RECORD
void searchRec(); // SEARCH THE RECORDS
void editRec(); // EDIT A RECORD
void delRec(); // DELETE A RECORD

int main(){
    while(1){

        // it must contain account number,
        first name, last name and balance
        cout << "1 - Write Record\n";
        // read the record using the account
        number
        cout << "2 - Read Record\n";
        // search the record using the account
        number
        cout << "3 - Search Record\n";
        // search using the account number
        cout << "4 - Edit Record\n";
        // edit record using the account number
        cout << "5 - Delete Record\n";
```

```
        // delete record using account number
        cout << "6 - Exit\n\n";
        cout << "Your Choice: ";
        cin >> choice;
        system("cls");
        switch(choice){
            case 1:
                writeRec();
                system("cls");
                break;
            case 2:
                readRec();
                system("cls");
                break;
            case 3:
                searchRec();
                system("cls");
                break;
            case 4:
                editRec();
                system("cls");
                break;
            case 5:
                delRec();
                break;
            case 6:
                system("cls");
                return 0;
                break;
            default:
                cout << "Invalid key. Please
Try again!:";
                system("pause");
                system("cls");
                break;
        }
    }
}

void writeRec(){
    ofstream outFile("data.txt",
std::ios_base::app);
    ofstream
outaccFile("accounts.txt",std::ios_base::app);
    Data info; // CALLING THE CLASS
    //ASKING FOR INPUTS
    cout << "Account number: ";
    cin >> info.accNum;
    outFile<< info.accNum << endl;
    outaccFile << info.accNum << endl;
```

```
        cout << "First Name: ";
        cin >> info.fName;
        outFile << info.fName << endl;
        cout << "Last Name: ";
        cin >> info.lName;
        outFile << info.lName<< endl;
        cout << "Balance: ";
        cin >> info.bal;
        outFile << info.bal<< endl;
        outFile.close();
    }

    void readRec(){
        ifstream inFile ("data.txt",
std::ios_base::app);
        string line;
        string accNum2;
        cout << "Enter the Account Number: ";
        cin >> accNum2;
        // THIS WILL SEARCH THOURGH EVERY LINE
        // UNTIL IT FOUNDS THE ACC NUMBER
        // AFTER 3 LINES OF ACC NUMBER,
        // IT WILL BE OUTPUTED
        while (!inFile.eof()){
            inFile >> line;
            if(accNum2 == line){
                for (int i=0;i < 3;i++){
                    inFile >> line;
                    if(i==0)
                        cout << "First Name: " << line <<
endl;
                        else if (i==1)
                            cout << "Last Name: " << line <<
endl;
                        else
                            cout << "Balance: " << line <<
endl;
                    }
                    system("pause");
                }
            }
            inFile.close();
        }

        void searchRec(){
            ifstream
accFile("accounts.txt",std::ios_base::app);
            string accNum2;
            string search;
            cout << "Enter the Account Number: ";
```

```
        cin >> search;
        // WILL SEARCH THOURGH EVERY LINE IN THE
ACCOUNT.TXT
        // THEN IT WILL CHECK FOR EQUALITY
        while (!accFile.eof()){
            accFile >> accNum2;
            if (search == accNum2){
                cout << "Record Found!\n";
                system("pause");
                break;
            } else if (accFile.eof()){
                cout << "Record Not Found!\n";
                system("pause");
                break;
            }
        }
        accFile.close();
    }

void editRec(){
    ifstream inFile ("data.txt",
std::ios_base::app);
    ofstream fileTemp
("datatemp.txt",std::ios_base::app);
    Data info2;
    string line1;
    string accNum3;
    string strTemp[3];
    // ASKING FOR NEW INPUTS
    cout << "Enter the Account Number: ";
    cin >> accNum3;
    string strReplace[3];
    string strNew[3];
    cout << "New First Name: ";
    cin >> info2.fName;
    strNew[0] = info2.fName;
    cout << "New Last Name: ";
    cin >> info2.lName;
    strNew[1] = info2.lName;
    cout << "New Balance: ";
    cin >> info2.bal;
    strNew[2] = info2.bal;
    // THIS WILL SEARCH THE TXT FILE
    // AND THEN WILL FIND THE ACC NUMBER
    // AND AFTER THE 3 LINES OF ACC NUM,
    // IT WILL BE EDITED AND
    // ALL THE NEW DATA WILL BE SAVED TO A NEW
TXT FILE
    for(int i = 0 ; i < 3;i ++){
        strReplace[i] == strNew[i];
    }
}
```

```
string line2;
while (!inFile.eof()){
    inFile >> line2;
    if(accNum3 == line2){

        fileTemp << accNum3 << endl;
        for (int i=0;i < 3;i++){
            fileTemp << strNew[i]<<endl;
            inFile >> line2;
        }
    }
    else if (accNum3 != line2){
        fileTemp << line2 << endl;
    }
}
// TO RENAME AND REMOVE THE TXT FILE
inFile.close();
fileTemp.close();
system("del.\\data.txt");
system("ren.\\datatemp.txt data.txt");
cout << "Successfully edited the
account!\n";
system("pause");
}

void delRec() {
    //to overwrite accounts.txt
    ifstream
accFile("accounts.txt",std::ios_base::app);
    ofstream
outaccFile("accountstemp.txt",std::ios_base::app);
    //to also overwrite data.txt
    ifstream inFile ("data.txt",
std::ios_base::app);
    ofstream fileTemp
("datatemp.txt",std::ios_base::app);
    string line3;
    cout << "Enter Account Number: ";
    string accNum;
    cin >> accNum;
    while(!inFile.eof()){
        inFile >> line3;
        if(line3==accNum){
            for(int i =0;i < 4 ;i++){
                inFile >> line3;
            }
        } fileTemp << line3 << endl;
    }
    //to delete accnumber in accounts.txt
```

```
        string acc;
        while (!accFile.eof()){
            accFile >> acc;
            if (acc == accNum){
                accFile >> acc;
            }
            outaccFile << acc << endl;
        }

        //close all files
        inFile.close();
        fileTemp.close();
        outaccFile.close();
        accFile.close();
        //to rename and delete the files to complete
        overwrite
        system("del.\\accounts.txt");
        system("ren.\\accountstemp.txt
accounts.txt");
        system("del.\\data.txt");
        system("ren.\\datatemp.txt data.txt");
        cout << "\nSuccesfully Deleted Account: " <<
accNum << endl << endl;

    }
```

SCREENSHOTS

1. WRITING AD READING:

```
D:\REPO\Prog2LabFiles\Practical Exam\
1 - Write Record
2 - Read Record
3 - Search Record
4 - Edit Record
5 - Delete Record
6 - Exit

Your Choice:
```

```
D:\REPO\Prog2LabFiles\Practical E
Account number: 123
First Name: Mark
Last Name: Capili
Balance: 99
```

```
1 - Write Record
2 - Read Record
3 - Search Record
4 - Edit Record
5 - Delete Record
6 - Exit

Your Choice: 2_
```

```
Enter the Account Number: 123
First Name: Mark
Last Name: Capili
Balance: 99
Press any key to continue . . . _
```

```
1 - Write Record
2 - Read Record
3 - Search Record
4 - Edit Record
5 - Delete Record
6 - Exit

Your Choice: 1_
```

```
D:\REPO\Prog2LabFiles\Practical Exam\
Account number: 321
First Name: Meryl
Last Name: Diolola
Balance: 88
```

```
Enter the Account Number: 312
First Name: Rhea
Last Name: Capili
Balance: 44
Press any key to continue . . . _
```

```
Enter the Account Number: 321
First Name: Meryl
Last Name: Diolola
Balance: 88
Press any key to continue . . .
```

2. SEARCHING IF ACCOUNT NUMBER EXIST:

```
Enter the Account Number: 123
Record Found!
Press any key to continue . . . _
```

```
Enter the Account Number: 444
Record Not Found!
Press any key to continue . . .
```

3. EDITING AND ADDING RECORDS:

After editing: (used read function)

```
Enter the Account Number: 123
New First Name: John
New Last Name: Doe
New Balance: 78
Successfully edited the account!
Press any key to continue . . .
```

```
Enter the Account Number: 123
First Name: John
Last Name: Doe
Balance: 78
Press any key to continue . . .
```

Use search if account number 123 is still exist

```
Enter Account Number: 123
Succesfully Deleted Account: 123

1 - Write Record
2 - Read Record
3 - Search Record
4 - Edit Record
5 - Delete Record
6 - Exit

Your Choice: _
```

```
Enter the Account Number: 123
Record Not Found!
Press any key to continue . . .
```

What's happening in the folder while deleting and editing...

Name	Date Modified	Type
accounts.txt	3/11/2020 8:43 PM	Text Document
app.cpp	3/11/2020 7:42 PM	C++ Source File
app.exe	3/11/2020 8:44 PM	Application
data.txt	3/11/2020 8:43 PM	Text Document

accounts.txt	3/11/2020 8:43 PM	Text Document
accountstemp.txt	3/11/2020 8:44 PM	Text Document
app.cpp	3/11/2020 7:42 PM	C++ Source File
app.exe	3/11/2020 8:44 PM	Application
data.txt	3/11/2020 8:43 PM	Text Document
datatemp.txt	3/11/2020 8:44 PM	Text Document