

1. Menu-driven program with file and functions

In the lab of Chapter 5, we created a menu-driven program. Modify it so it will have functions for each of the options, instead of having all the code in the main() function.

Source Code:

```
//DO NOT MODIFY THIS SECTION
#include <iostream>
#include <fstream>
#include <string>

using namespace std;

//prototypes
void modify1();
void modify2();
void modify3();
void displayData();
void save();

//globals
int age1, age2, age3, option = 0;
string name1, name2, name3;
ifstream ifile;
ofstream ofile;
bool saved;

int main()
{
    ifile.open("students.txt");
    //ADD YOUR CODE FROM HERE, INCLUDE YOUR FUNCTIONS
    //1. Read info
    ifile >> age1;
    getline(ifile, name1);
    ifile >> age2;
    getline(ifile, name2);
    ifile >> age3;
    getline(ifile, name3);

    //2.Close File
    ifile.close();
    saved = false;

    //3.Repeat while not leaving
    while (saved == false)
    {
        //3.1 Display Menu
        cout << "1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5.
Save, 6. Quit" << endl;
        //3.2 Request Option
        cin >> option;
        //3.3 Switch Case
        switch (option)
        {
            //3.3.1 Case 1, display data
            case 1:
```

```

        displayData();
        break;
        //3.3.2 Case 2, modify first student
    case 2:
        modify1();
        break;
        //3.3.3 Case 3, modify second student
    case 3:
        modify2();
        break;
        //3.3.4 Case 4, modify third student
    case 4:
        modify3();
        break;
        //3.3.5 Case 5, Save information
    case 5:
        save();
        break;
        //3.3.6 Case 6, Quit
    case 6:
        return 0;
    }
    return 0;
}

//4. Define functions
void modify1()
{
    cout << "Enter age1: ";
    cin >> age1;
    cout << "Enter name1: ";
    cin.ignore();
    getline(cin, name1);
}

void modify2()
{
    cout << "Enter age2: ";
    cin >> age2;
    cout << "Enter name2: ";
    cin.ignore();
    getline(cin, name2);
}

void modify3()
{
    cout << "Enter age3: ";
    cin >> age3;
    cout << "Enter name3: ";
    cin.ignore();
    getline(cin, name3);
}

void displayData()
{
    cout << age1 << " " << name1 << endl << age2 << " " << name2 << endl << age3
<< " "

```

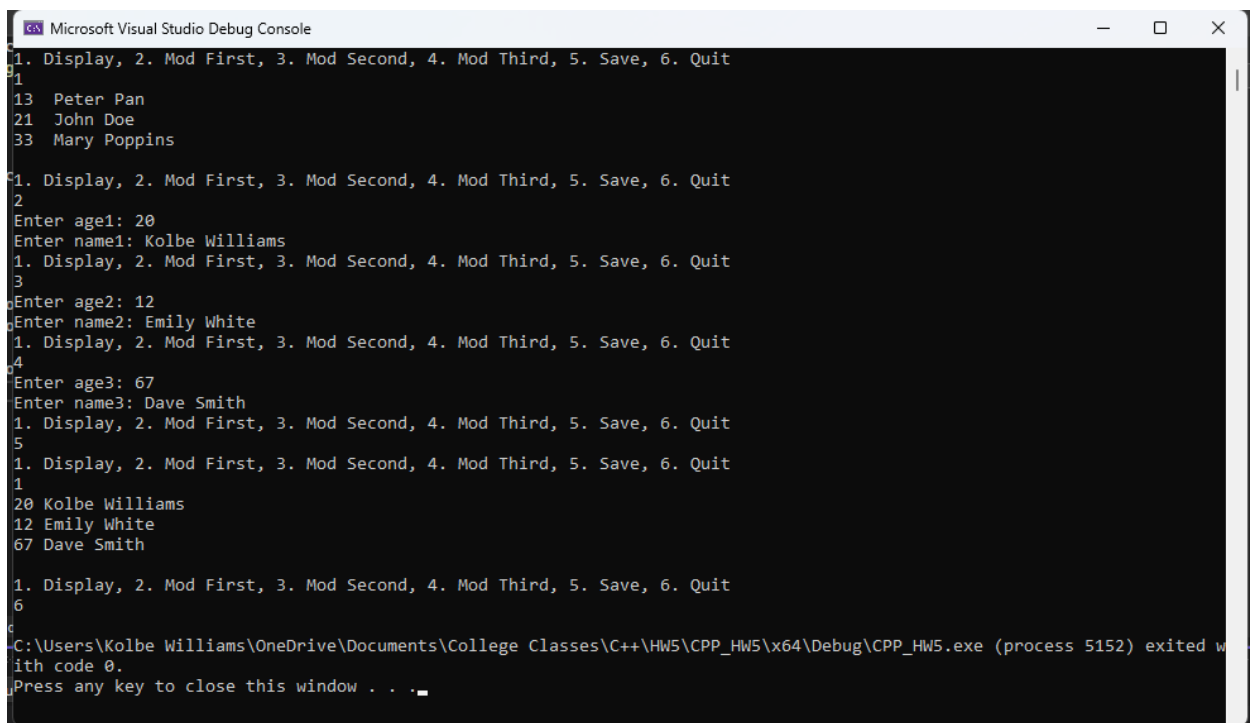
```

        << name3 << endl << endl;
    }

void save()
{
    ofile.open("students.txt");
    ofile << age1 << " " << name1 << endl << age2 << " " << name2 << endl << age3
<< " "
        << name3 << endl;
    ofile.close();
}

```

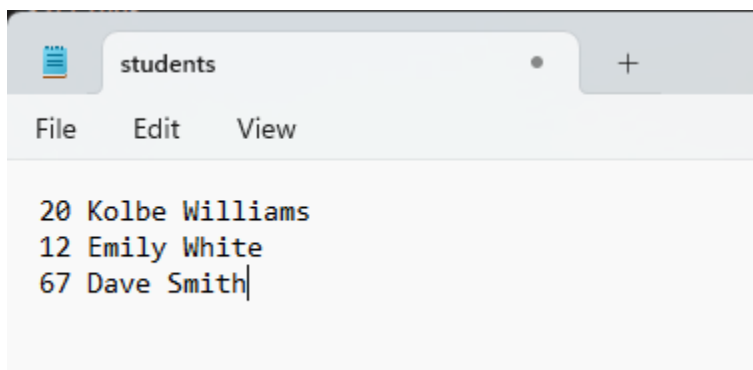
Output:



```

Microsoft Visual Studio Debug Console
1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5. Save, 6. Quit
1
13 Peter Pan
21 John Doe
33 Mary Poppins
1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5. Save, 6. Quit
2
Enter age1: 20
Enter name1: Kolbe Williams
1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5. Save, 6. Quit
3
Enter age2: 12
Enter name2: Emily White
1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5. Save, 6. Quit
4
Enter age3: 67
Enter name3: Dave Smith
1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5. Save, 6. Quit
5
1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5. Save, 6. Quit
1
20 Kolbe Williams
12 Emily White
67 Dave Smith
1. Display, 2. Mod First, 3. Mod Second, 4. Mod Third, 5. Save, 6. Quit
6
C:\Users\Kolbe Williams\OneDrive\Documents\College Classes\C++\HW5\CPP_HW5\x64\Debug\CPP_HW5.exe (process 5152) exited with code 0.
Press any key to close this window . . .

```



```

students
File Edit View
20 Kolbe Williams
12 Emily White
67 Dave Smith

```