

## **User Input Program**

Alex Carpenter

Colorado State University-Global Campus

CSC 450: Programming III

Dr. Bindu George

October 12, 2025

### CTA 5 Main Program Code

```
//Needed packages, algorithm will be used to reverse strings.
#include<iostream>
#include<fstream>
#include<string>
#include<algorithm>

//Standard namespace declaration
using namespace std;

//Main Function, main entry point.
int main() {

    //Declaring some strings that hold filenames.
    string fileName = "CSC450_CT5_mod5.txt";
    string fileNameReversed = "CSC450-mod5-reverse.txt";

    //This part asks the user for some input to be appended to the file.
    //It stores their input into a string called "usersInput".
    cout << "Enter some text to add to the end of the file: ";
    string usersInput = "";
    getline(cin, usersInput);

    //Here, we take what the user entered and append it to the end of the text file.
    ofstream outFile(fileName, ios::app);
    outFile << usersInput << endl;
    outFile.close();

    //Just an output line to the terminal, some feedback to let us know things are happening!
    cout << "Data appended to " << fileName << endl;

    //A new ifstream called "infile" I like to think of these as a "Scanner" from Java.
    //It is necessary to read from a file.
    ifstream inFile(fileName);
    //Storing that text from the inFile ifstream reading from the source text and storing it into
    "fileText" string.
    string fileText((istreambuf_iterator<char>(inFile), istreambuf_iterator<char>()));
    inFile.close();

    //Reverse the string, using the function "reverse" imported from algorithm package.
    reverse(fileText.begin(), fileText.end());

    //Write reversed string into new file
    ofstream outPutFile(fileNameReversed);
```

```

outPutFile << fileText;
outPutFile.close();

//Just an output line to the terminal, some feedback to let us know things are happening!
cout << "Reversed content written to: " << fileNameReversed << endl;

// Wait For Output Screen
std::cin.get();

//Main Function return Statement
return 0;
}

```

### CTA 5 Main Program Pseudocode

```

//Main function / main entry point.
FUNCTION Main() {
    //Declaring some strings that hold filenames.
    DEFINE a string called 'fileName' equal to "CSC450_CT5_mod5.txt"
    DEFINE a string called 'fileNameReversed' equal to "CSC450-mod5-reverse.txt"

    //This part asks the user for some input to be appended to the file.
    //It stores their input into a string called "usersInput".
    PRINT("Enter some text to add to the end of the file: ")
    DEFINE a string called 'usersInput' equal to the users input in the console.

    //Here, we take what the user entered and append it to the end of the text file.
    DEFINE an ofstream called 'outFile' in "append mode"
    read the contents of 'fileName' using ofStream, adding "usersInput" to the end
    close the ofstream

    //Just an output line to the terminal, some feedback to let us know things are happening!
    PRINT("Data appended to file")

    //Read entire file content into a string
    DEFINE an ifstream called 'inFile' in "read mode"
    DEFINE a string called "fileText" and setting it equal to characters from inFile
    Close the inFile

    //Reverse file content
    //(There is almost always a package function for this in languages.)
    Reverse characters in fileText
}

```

```

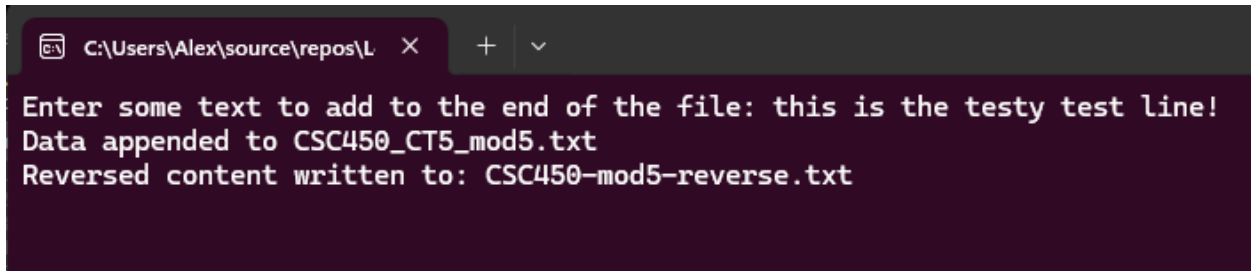
// Write reversed content into new file
DEFINE an ofstream called 'outPutFile' in "write mode" (Outputting to reverse text file)
Write the contents of fileText, which should now be reversed into the outPutFile
Close the outPutFile

//Just an output line to the terminal, some feedback to let us know things are happening!
Print("Reversed content written to fileNameReversed")

//Waiting for input as to not immediately close the console.
}

```

### Main Program Output Console Screenshot



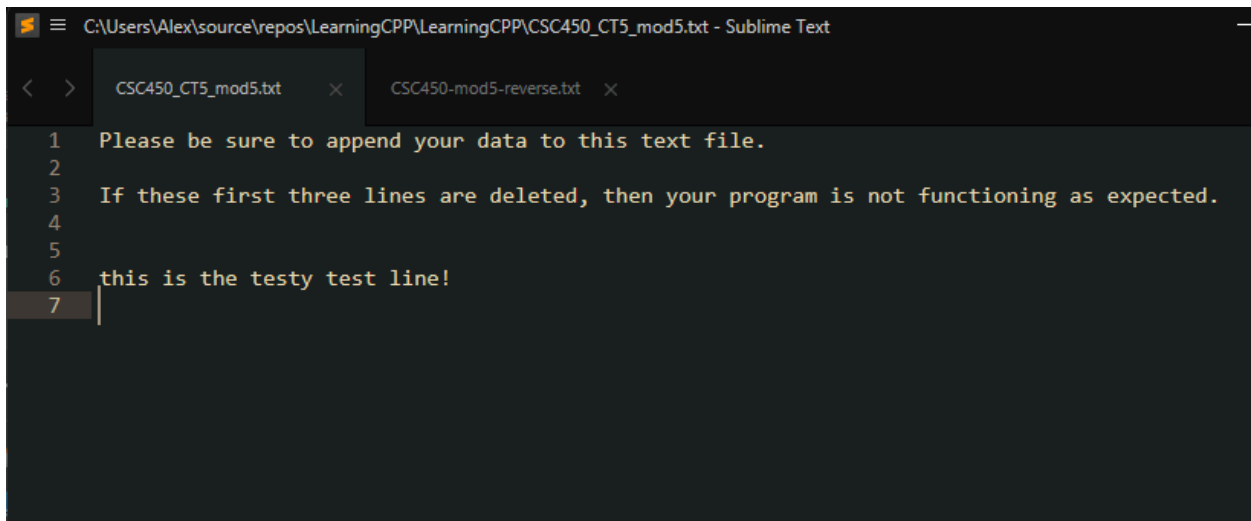
A screenshot of a console window with a dark background. The title bar shows the file path 'C:\Users\Alex\source\repos\L'. The output text is as follows:

```

Enter some text to add to the end of the file: this is the testy test line!
Data appended to CSC450_CT5_mod5.txt
Reversed content written to: CSC450-mod5-reverse.txt

```

### Regular Appended Text Result



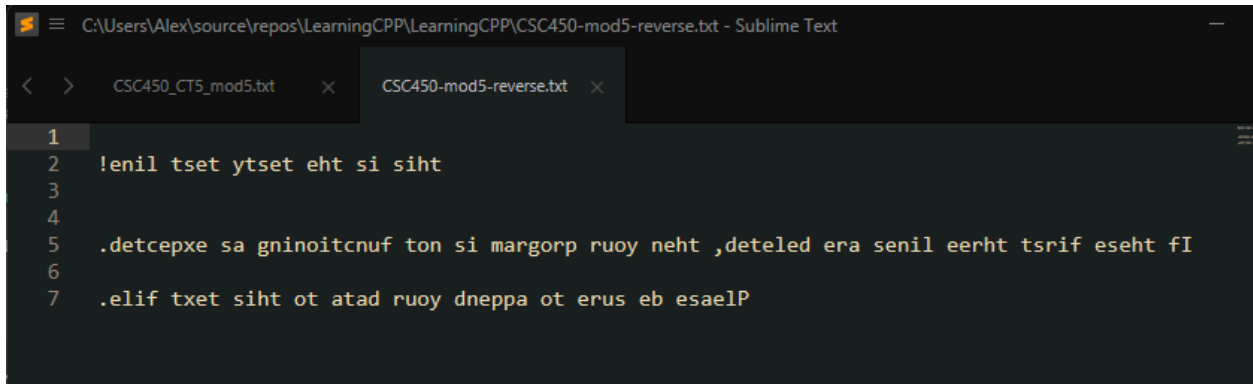
A screenshot of the Sublime Text editor. The title bar shows the file path 'C:\Users\Alex\source\repos\LearningCPP\LearningCPP\CSC450\_CT5\_mod5.txt - Sublime Text'. The editor has two tabs open: 'CSC450\_CT5\_mod5.txt' and 'CSC450-mod5-reverse.txt'. The first tab is active and shows the following text:

```

1 Please be sure to append your data to this text file.
2
3 If these first three lines are deleted, then your program is not functioning as expected.
4
5
6 this is the testy test line!
7

```

### Regular Appended Text Result



```
1
2 !enil tset ytset eht si siht
3
4
5 .detcepxe sa gninoitcnuf ton si margorp ruoy neht ,deteled era senil eerht tsrif eseht fI
6
7 .elif txet siht ot atad ruoy dneppa ot erus eb esaelp
```

### GitHub Link

[https://github.com/Alpentater/CSC450\\_Workspace/tree/main/CTA5](https://github.com/Alpentater/CSC450_Workspace/tree/main/CTA5)