

Classes in C++

First, please check this link for info on how to use classes in c++:

<http://www.cplusplus.com/doc/tutorial/classes/>

And also how to use files in C++: <http://www.cplusplus.com/doc/tutorial/files/>

Then check this code, compile and run it to see how it works.

<http://pld.ttu.ee/~trkal/E/classes2.cpp>

This code utilizes a stack of classes to read the contents of a file then write the data to new file (data is saved to stack so the contents are written to new file backwards).

Homework:

Finish the following code: <http://pld.ttu.ee/~trkal/E/hw3103.cpp>

The program must read the contents of a text file (students' names, codes and grades with grade points). Create a function to calculate the weighted average grade for every student and print it to a new file.

When creating a stack of classes, use *new* instead of *malloc*, *calloc* and *realloc*.

Use *cout* and *cin*, not *printf* and *scanf*.

For extra points, use stringstream

(<http://www.cplusplus.com/reference/sstream/stringstream/stringstream/>)

to save the data from the text file and use it to calculate the average grades.

Few tips for stringstream:

- 1) Add 1 stringstream after another (ss value is "ss1ss2"):

```
stringstream ss;  
stringstream temp;  
ss << "ss1";  
temp << "ss2";  
ss << temp.str();
```
- 2) Read an integer from a stringstream (amount is equal to 33):

```
stringstream ss;  
ss << "33";  
int amount;  
ss >> amount;
```

Note that when passing a stringstream to a function, be sure to pass it as a reference!