

ENG 101

Programming assignment #0

Due Saturday Jan 15th at 4pm.

This is worth 1% of your course grade.

From the webpage you are to download and fix the file “wrong.cc”. The program actually consists of a number of C++ functions which compute various standard mathematical functions (factorial, power, sin, cos, and combinations). Our guess is that you will take somewhere between 30 minutes and 2 hours assuming you have a lab instructor around to ask occasional questions.

Requirements:

- Each of the functions should work as advertised. So $\cos(x)$ should really compute the $\cos(x)$ (where x is in radians).
- The code should be readable. One of the functions is not indented correctly. You will need to fix that and insure that any code you add is also indented correctly.
- You may not change the function names, arguments or return values.
- Your solution may not include a `main()` function.

Suggestions/Hints:

- Look over the code first. Notice that certain functions call other functions.
- Format the unformatted code first. It really will help with debugging.
- Next, try to fix all the syntax errors. The compiler should help you out by telling you which line numbers the errors are on. Sometimes the compiler will get a line number wrong (the error was earlier in the code, but the compiler couldn't find the problem until later.)
- Carefully test each function. Start with the ones that don't rely on any of the other (possibly broken) functions in the file. You can test each function by calling it and printing out the response. To do this you will want to use a main function in a different file (see below). We have provided a sample main for you to use as a starting point. The file is “p0main.cc” and it can be found on the webpage.
- If your program doesn't finish in a reasonable period of time, “CNTL-C” will end the program. This likely means your program went into an infinite loop. You will need to figure out why.

To compile more than one file at a time put each of them on the command line. So:

```
g++ wrong.cc p0main.cc
```

should compile each of the two.

Directions for handing in this assignment will be posted on the web page at least 48 hours before it is due.