

Homework 1 - Hello World

Due by 5:00 p.m. Tuesday, 9/2/14

For this assignment you will write a simple program in C that prints out the following string on the shell command line: `Hello <your name>, welcome to 415!` where `<your name>` is replaced by your name (you should store the value of your name in a `#DEFINE`'d constant).

You will implement two versions of your program: one executing on a Linux platform and implemented using the POSIX system calls, and the other executing on a Windows platform and implemented using the Win32 system calls. At least one of the platforms needs to be a virtual machine. The Linux version should be implemented using a single low level `write()` system call, along with the `sprintf()` utility to format your output into a buffer prior to printing. Check the Linux man pages for details on how to use POSIX system calls (including the `#include` directives you will need for each one). Use `gcc` to compile your program. The Win32 version of your program should use a single low level `WriteFile()` Win32 API call, along with the `sprintf()` utility to format your output into a buffer prior to printing. Check the MSDN documentation for details on how to use Win32 system calls. Use `cl` to compile your program.

You should submit your source code files (one for each platform) and a short writeup in pdf format that includes a description of what you did, the compilation and execution output from each of your programs, and a screen capture of your virtual machine running inside your host operating system. Submit everything to the regular submission link on iLearn, and then submit just the writeup to the TurnItIn link to generate an originality report.