## CS330: Programming Language Project (PLP) Assignment 2: Installation, programming environment, and Hello, World!

Install your programming language, write a "hello world" program, and run the program.

```
[dhcp-92-125:~ melatassefa$ swift --version
Apple Swift version 5.2.4 (swiftlang-1103.0.32.9 clang-1103.0.32.53)
Target: x86_64-apple-darwin19.6.0
[dhcp-92-125:~ melatassefa$ cd Desktop
[dhcp-92-125:Desktop melatassefa$ swift hello.swift
Hello World
```

1. Can this language be installed on any operating system (Windows, Mac, Unix/Linux)? If not, what are its limitations?

Swift is an open-source language so it can be installed on most operating systems, including iOS, macOS, Linux, Windows and Android.

2. Give instructions for how to install the language

Go to <a href="https://swift.org/download/">https://swift.org/download/</a>, and download the version that's applicable to your operating system. After the download finishes, run the program and follow the instructions to install Swift.

3. Where do you write programs in this language (as in: in a text editor, a special editor just for that language, something else?) Does this language come with a recommended programming environment? What is it? If not, how did you pick the one that you'll be using?

I write my programs on Atom, a text editor, and I chose this primarily for convenience reasons, because I was using it in some of my other courses, but there are other options available. The most common and recommended programming environment is XCode.<sup>2</sup>

4. How do you run programs that you write?

I use Terminal on Mac and type swift file name.swift to run the code.

5. Is there a lot of boiler-plate code that you need to write a program (like in Java)? Or can you just start writing (like in Python and Perl)?

There is no boiler-plate code in Swift, you just start from wherever you want to start!

6. How do you write comments in your language?

You write comments using // in Swift.3

<sup>&</sup>lt;sup>1</sup> Inc., Apple. "Swift.org." *A Swift Tour - The Swift Programming Language (Swift 5.3)*, docs.swift.org/swift-book/GuidedTour/GuidedTour.html.

<sup>&</sup>lt;sup>2</sup> Inc., Apple. "Xcode." *Apple Developer*, developer.apple.com/xcode/.

<sup>&</sup>lt;sup>3</sup> Inc., Apple. "Swift.org." *The Basics - The Swift Programming Language (Swift 5.3)*, docs.swift.org/swift-book/LanguageGuide/TheBasics.html.