CS330: Programming Language Project (PLP)

Assignment 2: Installation, programming environment, and Hello, World!

Now that you've picked a language and learned about its history and uses, it's time to actually get it set up and use it. For this assignment you must:

1. Install your programming language and anything else that it needs to run (a programming environment or something similar)
2. Write a "hello world" program in that language (checking the Internet for one is fine)
3. Run the program
4. Be prepared to show me that you can run the program during lab

Your write-up should address the following questions. Try to answer them in such a way that someone else would be able to follow your instructions and run your program (because someone probably will...):

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

   Lua can be installed on any operating system.

2. Give instructions for how to install the language

   - **First go to https://www.lua.org/, the official website for this programming language.**
   - **Click on Download**
   - **It will give you the options to have the free software, however, it needs to be compiled. If you don't want to do so, there's another option which is downloading the binary version, and for that you click on get a binary.**
   - **It will bring you to the LuaBinaries page, and on the left side, click download**
   - **Select the version that is compatible with your computer**
   - **As you click on the selected version, there will be a pop up window which downloads the file**
   - **After the download is complete, go to the location of your file, and extract the folder**
   - **Then enjoy the Lua programming language**

3. Where do you write programs in this language (as in: in a text editor, a special editor just for that language, something else?)

I choose to write my code in Atom, but it could be used with all other text editors.

a. Related: 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?

This language does not come with a recommended programming environment, on its official website it said, "Use your favorite text editor to write your Lua programs." So I picked Atom because I already have that installed in my computer.

4. How do you run programs that you write?

I would use Atom to first create and save .lua files and start writing programs, after I finish or I want to test it out, I can use my command prompt or Lua's command prompt to run my program. (just like perl)

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)?

It is like Python.

6. How do you write comments in your language?

A comment starts anywhere with a double hyphen (--) and runs until the end of the line. Lua also offers block comments, which start with --[[and run until the corresponding]].

The answers to these questions will be put in a GitHub repository that you create, which you will send me a link to. Make sure that your answers are clear, accurate, and fully-formed: remember that these tutorials are public, and GitHub users don't have the context of the assignment that you do.

Explain the reasoning behind the answers as much as possible. If there is no clear-cut answer to a question, explain why not. And cite your sources!

A sample GitHub tutorial (for Perl) can be found here:
https://github.com/amber-stubbs/PerlTutorial