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?
   1. PHP and Apache are free open source software programs, thus, can be installed on any operating systems (Windows, Mac, Linux)
2. Give instructions for how to install the language
   1. I follow the instruction in [here](https://linuxize.com/post/how-to-install-php-on-ubuntu-18-04/) for Linux
      1. First, open terminal on Linux
      2. Type “sudo apt install php libapache2-mod-php” (without the parenthesis), press enter
      3. They’ll ask for the password of the user
      4. Then type “sudo systemct1 restart apache2” (without the parenthesis), to restart the apache
3. Where do you write programs in this language (as in: in a text editor, a special editor just for that language, something else?)
   1. 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?
      1. I use a text editor to write my code by typing “gedit helloworld.php”. This will open a text editor as an php file. But does need Development servers such as Apache or XAMPP. I use Apache
4. How do you run programs that you write?
   1. There are 2 ways, I can either execute the code in command line or via localhost
      1. Terminal:
         1. Type “php filename.php”
      2. localhost:
         1. <http://localhost/hello.php>

I prefer execute in terminal because it’s more simple.

1. 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)?
   1. I would say it leans toward just start writing because PHP does not need a main to execute.
2. How do you write comments in your language?

#This is how to write a single line comment

//This is also how to write a single line comment

/\*This is also how to write

but it’s for multiple line comment

\*/

But one thing I do notice, the comments must be inside of the “?>” tag.

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>

Word Cite:

[Linuxize](https://linuxize.com/post/how-to-install-php-on-ubuntu-18-04/)

[W3 PHP Comments](https://www.w3schools.com/php/php_comments.asp)

[Manual to install PHP](https://www.php.net/manual/en/install.php)

[Cloudways: How to start PHP Program](https://www.cloudways.com/blog/how-to-start-php-programming/)

[Evantotuts+ How to run a PHP file](https://code.tutsplus.com/tutorials/how-to-run-a-php-file--cms-34769)