Our First Python Program

Finding a Python Interpreter

We have two choices when it comes to finding a Python Interpreter (remember, this is the thing that changes our programs into something that the computer can understand); we can either use an online interpreter, or we can download one. The benefit of using the online option is that we don't need to install anything, and the benefit of downloading one is that, it will work even if you lose internet access.

For the moment, I'd recommend using an online interpreter, and we'll look at installing one on your computer later, some free online interpreters include:

https://www.python.org/shell/
https://www.programiz.com/python-programming/online-compiler/
https://repl.it/languages/python3
https://www.onlinegdb.com/online_python_interpreter

So pick any of the above webpages, and you should have a window to type commands in, and when you are finished, you can use the "Run" button (>) to run the program (NOTE: This is also called "executing the program"), and what that means is that the interpreter will change your program into binary for the computer.

Our First Program: Hello, World!

Our first Python program prints out a message to the screen, all we have to do is type in the following command:

```
print("Hello, World!")
```

And then run the program (by clicking the "Run" button), and if we have typed the program in correctly, we will see the following written on the screen:

```
Hello, World!
```

If we haven't typed it in exactly right, when we try to run the program, it won't work. Remember computers are really stupid, so it can't guess what you mean, you have to state your programs exactly correctly, and it will understand what you mean. If you leave out an inverted comma or bracket, the computer won't know what you mean, and will tell you there is an error, but don't worry, most programs will give you errors the first time you run them, so all you do is look for the error, fix it, and re-run the program.

Most programming courses and books (in every programming language) start with the "Hello, World!" program. It announces to the world that you are now a programmer, because once you complete your first program, you *are* a programmer. Also each program you write sees you contributing to the virtual world (cyberspace), so this first program means that you have started to claim a realm within cyberspace for yourself, and as you write more programs, you will find that your programs become more imbued with your spirit and persona.