**Using Python at Home**

This course will use two applications when writing programs: 1) an online editing environment called Replit and 2) an editor called WingIDE along with the Python language.

Replit is very convenient and easy to use, but it has limited functionality. There may be times when you will need a proper editor. For that reason, we will start day 1 by downloading and installing an IDE.

NOTE: These instructions are for Windows computers only. There is a version of Python that works on a Mac but I haven’t heard how easy it is to install. You might be better off just using Replit online at home. Or feel free to go to the [Python website](https://www.python.org/downloads/) and follow the instructions for downloading for Mac OSX.

**Installing WingIDE and the Python language**

The necessary installation files are in a folder called “downloads” available on Google Classroom.

Step 1: Find the file labeled “Python 3.3.0.msi”, right click and choose “download”. Once downloaded, double click to run the installer. When the installer starts running, click “next” to all the prompts. Don’t change anything.

This is the python language. You will not run this directly, but use a second program called an Integrated Development Environment (IDE) which will use the language to interpret the programs you write.

Step 2: Go back to the downloads folder in GC and find the “WingIDE 101” file. Right click and download. Once downloaded, double click to run the installer. Click “next” to all the prompts.

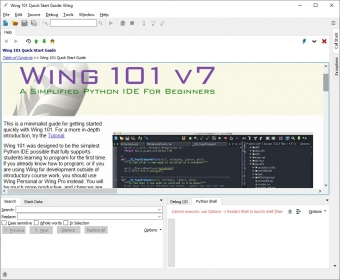
There is a third file installer for Pygame, but we will not need that until later. Do not install.

That’s it! Now that you have the language and IDE installed, you can run the IDE (you can type “Wing” in the search bar or look for WingIDE in your apps list.

Note: You can also download the Python language and any IDE you wish by finding them online. The main advantage of using the ones supplied above is that they will be compatible.

**The WingIDE environment**

Start up the WingIDE program. It should look something like this (but a different version):



The editor has three screens, a large one in the middle and two smaller ones at the bottom. At startup, the large window displays a welcome message. You can get rid of that message by clicking the red “X” in the upper right corner. This blank window is where you will write your programs. More on this later.

Now let’s examine the small screen at the bottom right. This screen displays useful stuff like the Python shell which will interpret small bits of code one line at a time. Make sure the “Python Shell” tab is clicked, then the screen should display this message:

Python 3.3.1 (default, Apr 10 2014, 23:31:26) [MSC v.1500 32 bit (Intel)]

Type "help", "copyright", "credits" or "license" for more information.

[evaluate untitled-1.py]

>>>

This displays the version of Python on your computer. If you do not see this message, that is a problem. It could be that you do not have Python on the drive or the IDE could not find it. If that’s the case, you will have to close WingIDE and skip to the next section (Coding with Replit). Ask your teacher for assistance on your next in-school day.

**Writing a program in the program shell**

If all is well, put your cursor at the >>> prompt and type the following code:

print (“hello” + “good bye!”)

and hit the enter key. When you do, you should see this:

>>> print (“hello” + ”goodbye”)

hellogoodbye!

Exciting stuff!

This window is useful for typing quick commands, for example to check the status of a variable. It is not meant to execute full programs. For that we use the main window.

Now let’s turn our attention back to the main window. This is our text editor where we will create our program. Click on it to get a blinking cursor in that window.

Copy the following code and paste it to the main window.

print ()

print ("hello")

print ("good bye")

print ("p.s. I'm shy")

To execute this program, click the green run button (it looks like a “play” arrow) on the menu bar.

The output to the program will be seen in the screen at the bottom where we wrote our first program. You should see this:

hello

goodbye

p.s. I’m shy

This is your first program! But hopefully not your last...

**Coding with Replit**

Replit is an online editor. It is very easy to use and is great for people working in groups. For now it is free.

Step 1: Google “replit python 3” and go to the Replit homepage.

You can use replit without signing up (I think still) but it is a convenient way to save your work online so you don’t have to transfer it from home to school and back. There is no obligation to sign up with Replit but feel free to do so. Be sure to use your school Gmail account when you register. If you don’t create an account, you can still copy and paste your code into a Google doc. It’s not the best way to transfer your programs, but it will do in a pinch.

Step 2: If you haven’t already done so, choose “Python” or Python 3 as the language. Replit can be used to interpret several languages, so you have to specify which language you will be using.

Step 3: Start coding!

The main window in the middle is where you write your code. You can try copying and pasting the code in the page above (in green highlight). Press the green button to execute. The output will show in the window on the right.

**Questions:**

1. The first line of your program is print(). What does this line do?
2. Take the first line out of your program (delete it). Run your code again and see what happens. Was your answer correct?
3. Put blank lines in between your lines of code to space them out (by hitting the enter key). Run your code now. Did it change your code?