

Using IDLE and Submitting PAs

UCSB CS 8 - Summer Session B 2016

Download and Install Python 3

In the Computer Science Instructional Lab (CSIL) in Phelps 3525, the latest version of Python 3 is already installed. However, if you wish to download and install Python 3 into your computer, do the following:

- The latest version of Python 3 is here: <https://www.python.org/downloads/>
- This will also install IDLE.
- Do NOT download Python 2; we are using Python 3 (version 3.5.2).

Using IDLE

IDLE (Integrated Development and Learning Environment) is the program development tool of Python 3. You will be using IDLE to develop and run your programs. First, determine where IDLE is on your machine. It is usually saved under

Applications > Python 3.5 > IDLE

on MacOS. For Windows, look into **Start Menu**. If you cannot find it, use your computer's built-in "search" function. If you still cannot find it, attend office hours and bring your computer with you so we can help.

Go ahead and run IDLE. You should see something like this:

```
Python 3.5.2 (v3.5.2:4def2a2901a5, Jun 26 2016, 10:47:25)
[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "copyright", "credits" or "license()" for more informat
ion.
>>>
```

This screen that first comes up is the IDLE **shell**. It is also sometimes referred to as the interactive shell or the console. We use this window to see the output of our programs, and to sometimes input information to our programs. This means we **do not write our programs in the shell**. Instead, we will write them in a separate file.

Creating a .py File

All programs written in Python have the .py extension. To open up a blank .py file, go to

File > New File

in IDLE. Another screen will come up with the word "Untitled" at the top:



Write your code in this screen. You can save your program by going to

File > Save As

Be sure to save often.

Running a .py File

To run your code, first make sure it is saved. Then, go to

Run > Run Module

If your code outputs numerical or string results, the output will be shown in the IDLE shell (the first screen that came up when we opened IDLE).

An Example .py File

The following program which is saved as `prog.py` computes $2^3 + 3^2$, and prints the result in the IDLE shell. The program is very simple is typed directly into the window:

A screenshot of a Python file editor window titled "prog.py - /Users/koc/Desktop/prog.py (3.5.2)". The window contains the following code:

```
x = 2**3
y = 3**2
z = x + y
print(z)
```

When we run the program using

Run > Run Module

the result of the program comes up inside the IDLE shell, as follows:

A screenshot of the IDLE shell showing the output of the program. The text in the shell is:

```
Python 3.5.2 (v3.5.2:4def2a2901a5, Jun 26 2016, 10:47:25)
[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "copyright", "credits" or "license()" for more informat
ion.
>>>
===== RESTART: /Users/koc/Desktop/prog.py =====
17
>>>
```

This is correct since $2^3 + 3^2 = 8 + 9 = 17$.

Submitting a Programming Assignment

Every one of programming assignments in this course will be a program similar to `prog.py`, and it is submitted using **Dropbox**. Simply click on the Dropbox link for the particular programming assignment, and locate and submit your program file by following the instructions given by Dropbox. If you have never used Dropbox before, you will have to create a (free) account on it.

Test your program as much as possible to make sure it works as required, and once you are certain, submit it using Dropbox. You can submit as many times as you want, but make sure that the **LAST VERSION** you submitted works correctly, since this is the one we will grade.