Intro. to Programming: Outline for Week 3

Liam J. Cattell

May 31, 2017

1 GitHub Repository

I have placed all the class materials in a github repository. To get the files go to:

https://github.com/liamjcattell/HSAPythonCode.

You can download all the files or just read them online.

- tip.py is the tip program we wrote in class.

- tk.py shows how to create a window. We will learn more about creating windows for your program input.

- turtle_penrose.py this is a fairly complex use of turtle graphics which produces penrose tilings. If you are interested in reading about Penrose tilings then look at the Wikipedia article

  https://en.wikipedia.org/wiki/Penrose_tiling

  This article involves advanced mathematics but it will give you an idea of what a penrose tiling is.

- Language Notes - Python.txt is a file containing information about using all the features of Python. We will only be able to cover a small fraction of the Python language.

- Day1.pdf and Day2.pdf are the course outlines.

2   Formatting Output

We will go over the print() function in more detail. In class we used formating for the print statements. In particular, I will explain the what the symbols: %f, %i, %c, %s, %6.2f are used for.

3   Programming with Turtle Graphics.

Write a program to draw a regular polygon with any number of sides. The input to the program will be the number of sides. We will need to use repetition. Also, learn how to change colors and shapes of the pen.

4   Defining Functions

Learn how to write basic functions using the *def* statement.