**Extra Project – Turtle Graphics**

Today you will be learning about the Turtle in Python. Later in this course we will be using the Turtle class to make other things but for today we will use it to make some basic geometric shapes.

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| #Make a rectangle  import turtle, time  t = turtle.Pen()  t.pencolor("Green")  for i in range(4):  t.forward(100)  t.left(90)  time.sleep(5)  turtle.bye() | #Make a pentagon  import turtle, time  t = turtle.Pen()  t.pencolor("Green")  for i in range(5):  t.forward(100)  t.left(72)  time.sleep(5)  turtle.bye() |

The turtle will use the Pen function to draw. The pencolor function will set the pen to the desired color. I imported to time module to all me to add a 5 second delay prior to closing the turtle graphics window with the turtle.bye() function.

Now try to make a regular triangle, regular octagon, and regular hexagon.

What happens as the number of sides of your polygon increases?

What happens if the left function parameter changes with each iteration?

What happens if the turn function has an incorrect angle that does not give a regular polygon?