# Python – Sierpinski

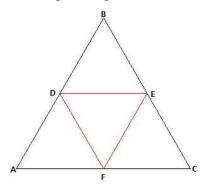
#### **Purpose**

This lab was designed to teach you how to use recursion in Python.

### **Description**

Recursion is a function that calls itself. Implement the draw\_fractal function that will draw the fractal as shown below. Instructions have been provided in the lab. The midpoint formula must be used to get the new points. The triangles will become progressively smaller, and the recursive calls stop when the triangles become imperceptible to the human eye.

The large triangle is ABC.



Draw  $\triangle$ ABC. Make recursive calls with  $\triangle$ ADF,  $\triangle$ DBE and  $\triangle$ FEC. Be diligent and make sure you make sure you invoke the function with the prescribed order(left, middle, and right coordinates).

Lab: Sierpinski

### **Program Shell**

lab 08 sierpinski.py has been provided for you

## **Sample Execution**

