#Albert George Extra Credit

from turtle import \*

def drawTriangle(points,color,myTurtle):

myTurtle.fillcolor(color)

myTurtle.up()

myTurtle.down()

myTurtle.begin\_fill()

myTurtle.goto(points[1])

myTurtle.goto(points[2])

myTurtle.goto(points[0])

myTurtle.end\_fill()

def getMid(p1,p2):

return((p1[0]+p2[0])/2,(p1[1]+p2[1])/2)

def sierpinski(points,degree,myTurtle):

colormap=['yellow', 'white', 'green','red','blue','violet','orange']

drawTriangle(points, colormap[degree],myTurtle)

if degree>0:

sierpinski([points[0],getMid(points[0],points[1]),getMid(points[0],points[2])],degree-1,myTurtle)

sierpinski([points[1],getMid(points[0],points[1]),getMid(points[1],points[2])],degree-1,myTurtle)

sierpinski([points[2],getMid(points[2],points[1]),getMid(points[0],points[2])],degree-1,myTurtle)

myTurtle=Turtle()

myWin=myTurtle.getscreen()

myPoints=[(-300,-250),(0,300),(300,-250)]

sierpinski(myPoints, 4, myTurtle)

myWin.exitonclick()

