import turtle

import math

turtle.pensize(1)

turtle.up()

turtle.left(90)

turtle.forward(200)

turtle.left(90)

turtle.forward(300)

turtle.down()

turtle.color("red")

turtle.begin\_fill()

for i in range(2):

turtle.left(90)

turtle.forward(400)

turtle.left(90)

turtle.forward(600)

turtle.end\_fill()

turtle.up()

turtle.left(90)

turtle.forward(100)

turtle.left(90)

turtle.forward(100)

turtle.left(90)

turtle.forward(60)

turtle.down()

# 大五角星

turtle.color("yellow")

turtle.right(162)

def paint1():

turtle.begin\_fill()

l=(60\*math.cos(math.radians(18)))/(1+math.sin(math.radians(18)))

for i in range(5):

turtle.forward(l)

turtle.left(72)

turtle.forward(l)

turtle.right(144)

turtle.end\_fill()

paint1()

#画五角星

def paint2():

turtle.right(162)

turtle.begin\_fill()

l=(20\*math.cos(math.radians(18)))/(1+math.sin(math.radians(18)))

for i in range(5):

turtle.forward(l)

turtle.left(72)

turtle.forward(l)

turtle.right(144)

turtle.end\_fill()

def paint3():

turtle.right(72)

turtle.begin\_fill()

l=(20\*math.cos(math.radians(18)))/(1+math.sin(math.radians(18)))

for i in range(5):

turtle.forward(l)

turtle.left(72)

turtle.forward(l)

turtle.right(144)

turtle.end\_fill()

def paint4():

turtle.left(18)

turtle.begin\_fill()

l=(20\*math.cos(math.radians(18)))/(1+math.sin(math.radians(18)))

for i in range(5):

turtle.forward(l)

turtle.left(72)

turtle.forward(l)

turtle.right(144)

turtle.end\_fill()

#第一个小五角星

turtle.up()

turtle.left(72)

turtle.forward(120)

turtle.down()

paint2()

#第二个小五角星

turtle.up()

turtle.left(162)

turtle.forward(20)

turtle.right(90)

turtle.forward(40)

turtle.right(math.degrees(math.atan(1/7)))

turtle.forward(20)

turtle.down()

paint2()

#第三个小五角星

turtle.up()

turtle.left(180-math.degrees(math.atan(1/7)))

turtle.forward(20)

turtle.left(90)

turtle.forward(20\*(1/7))

turtle.down()

paint3()

#第四个小五角星

turtle.up()

turtle.right(18)

turtle.forward(60)

turtle.right(90)

turtle.forward(20)

turtle.down()

paint4()

turtle.color("red")