

TURTLE GRAPHICS - Vignesh S

OLYMPIC RINGS

```
#Importing Turtle
import turtle
#set the pensize to 8
turtle.pensize(8)

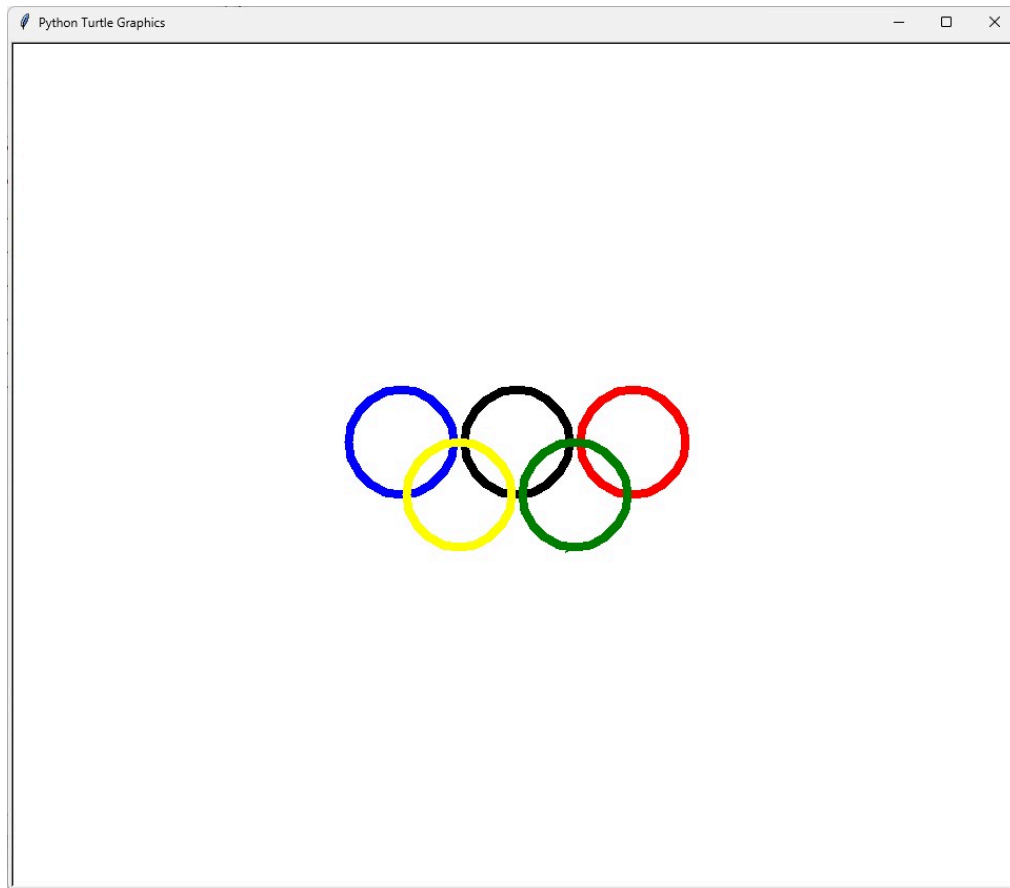
#first ring
turtle.color('blue')
turtle.penup()
#set the x and y coordinates to -110 and -25
turtle.goto(-110,-25)
turtle.pendown()
#set radius of circle to 50
turtle.circle(50)

#second ring
turtle.color('black')
turtle.penup()
turtle.goto(0,-25)
turtle.pendown()
turtle.circle(50)

#Third ring
turtle.color('red')
turtle.penup()
turtle.goto(110,-25)
turtle.pendown()
turtle.circle(50)

#fourth ring
turtle.color('yellow')
turtle.penup()
turtle.goto(-55,-75)
turtle.pendown()
turtle.circle(50)

#fifth ring
turtle.color('green')
turtle.penup()
turtle.goto(55,-75)
turtle.pendown()
turtle.circle(50)
turtle.done()
```



TURTLE DESIGN 1

GOOGLE LOGO

```
import turtle
#get the instance of turtle
t=turtle.Turtle()
#select color
t.color('#4285F4','#4285F4') ## RGB value of color
#change the pen size
t.pensize(5)
#change the drawing speed
t.speed(3)

t.forward(120)
t.right(90)
t.circle(-150,50) ## first circle for red color
t.color('#0F9D58')
t.circle(-150,100)
t.color('#F4B400')
t.circle(-150,60)
t.color('#DB4437','#DB4437')

t.begin_fill()
t.circle(-150,100)
t.right(90)
t.forward(50)
t.right(90)
t.circle(100,100)
t.right(90)
t.forward(50)
t.end_fill()
```

```

t.begin_fill()

## second circle for yellow color

t.color("#F4B400","#F4B400")
t.right(180)
t.forward(50)
t.right(90)

t.circle(100,60)
t.right(90)
t.forward(50)
t.right(90)
t.circle(-150,60)
t.end_fill()

# third circle of green color
t.right(90)
t.forward(50)
t.right(90)
t.circle(100,60)
t.color('#0F9D58','#0F9D58')
t.begin_fill()
t.circle(100,100)
t.right(90)
t.forward(50)
t.right(90)
t.circle(-150,100)
t.right(90)
t.forward(50)
t.end_fill()

##Draw last circle

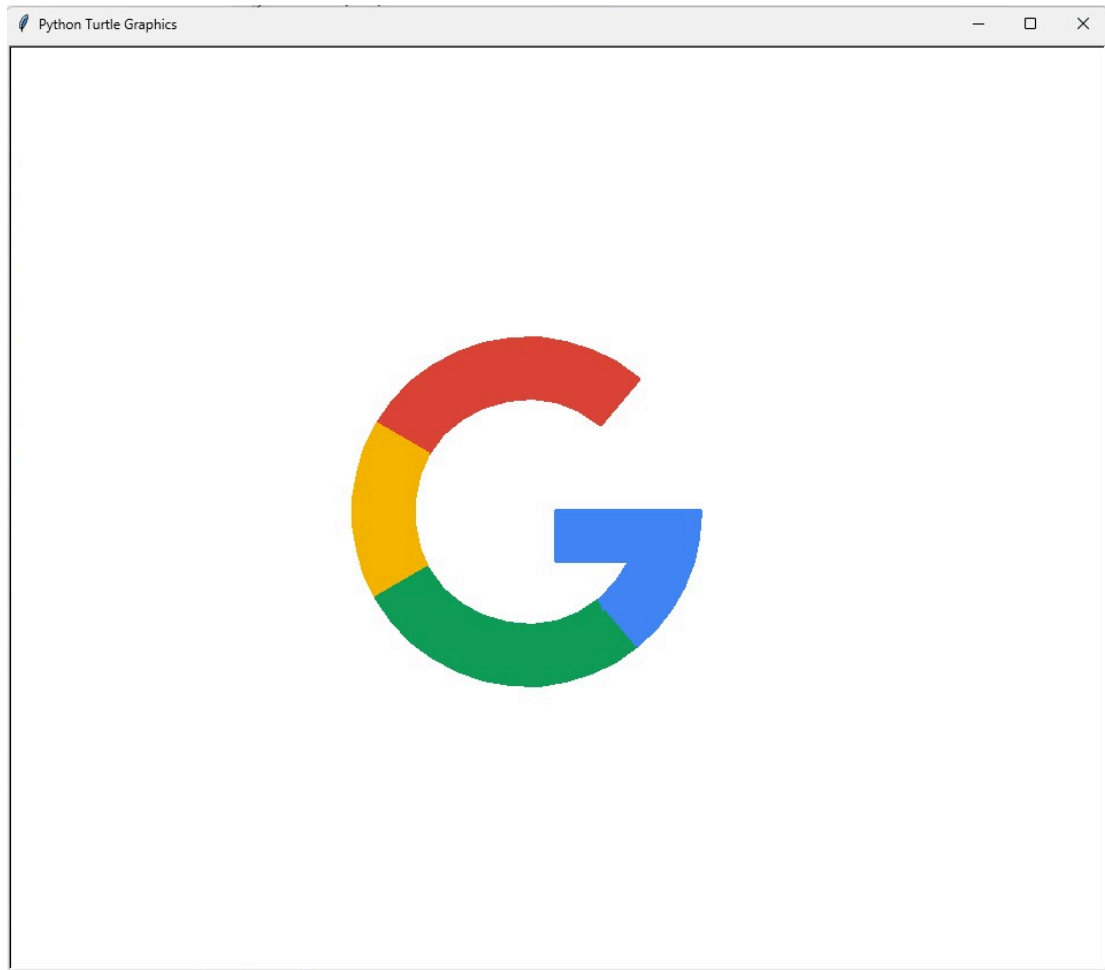
t.right(90)
t.circle(100,100)
t.color('#4285F4','#4285F4')
t.begin_fill()
t.circle(100,25)
t.left(115)
t.forward(65)
t.right(90)
t.forward(42)
t.right(90)
t.forward(124)
t.right(90)
t.circle(-150,50)
t.right(90)
t.forward(50)

t.end_fill()
t.penup()GRAPHIC DESIGN : 03

import turtle as t
t.speed(0)
t.tracer(10)
t.bgcolor('black')

```

```
color=('white', 'purple', 'cyan', 'pink')
for i in range(300):
    t.fillcolor(color [i%4])
    t.pensize(2)
    t.begin_fill()
    t.backward(i)
    t.rt(120)
    t.fd(i)
    t.right(0.0)
    t.end_fill()
t.exitonclick()
```



TURTLE DESIGN 2

SPOTIFY

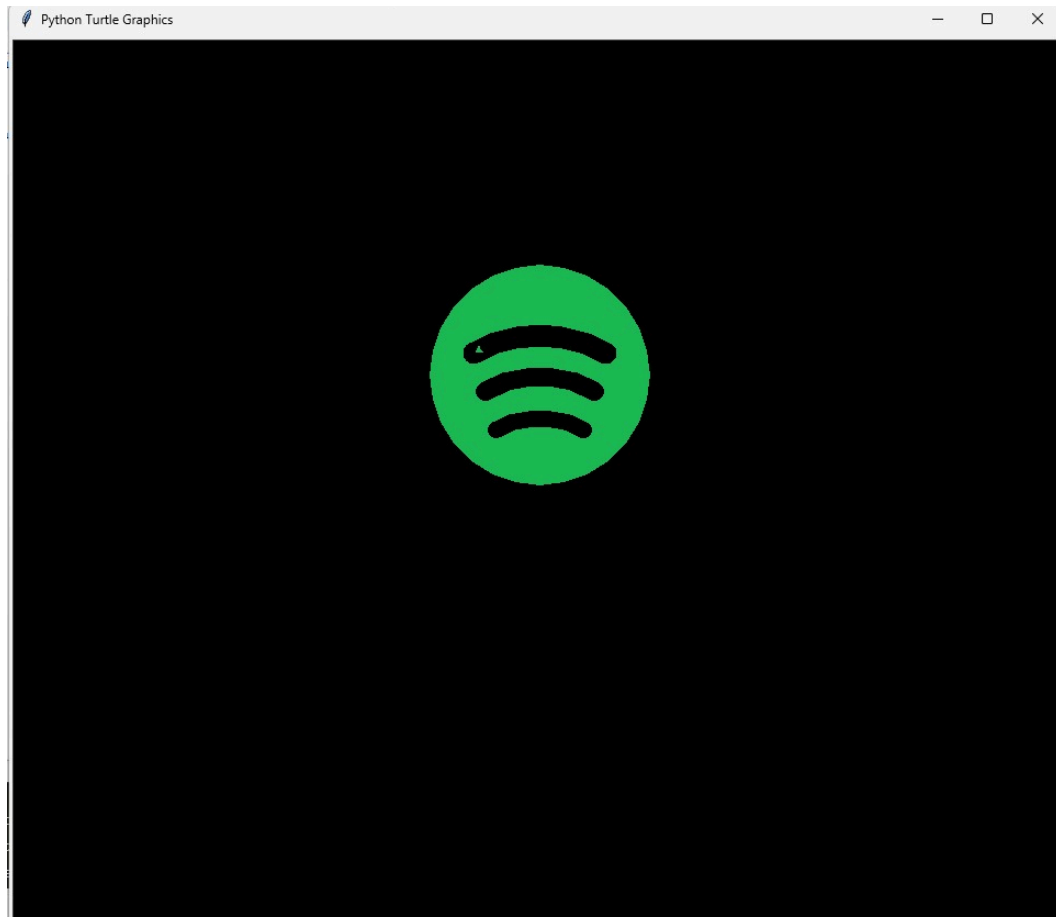
```
import turtle as tur

tur.Screen().bgcolor("Black")
tur.speed(15)
tur.begin_fill()
tur.fillcolor('#1DB954')
tur.pencolor("#1DB954")
tur.pensize(0)
tur.circle(100)
tur.end_fill()
tur.penup()
tur.goto(40,50)
tur.pendown()
tur.left(150)
tur.forward(0)
tur.pensize(15)
tur.pencolor('black')
tur.circle(80,60)
tur.penup()

tur.goto(50,85)
tur.pendown()
tur.pensize(17)
tur.right(60)
tur.forward(0)
tur.circle(100,60)

tur.penup()
tur.goto(60,120)
tur.pendown()
tur.pensize(20)
tur.right(60)
tur.forward(0)
tur.circle(120,60)

tur.done()
```



TURTLE DESIGN 3

CAPTAIN AMERICA SHIELD

```
import turtle
import math

# Create a turtle object
ca = turtle.Turtle()

def func_1(x, y):
    """Move the turtle to the given coordinates and set up initial configuration"""
    ca.penup()
    ca.goto(x, y)
    ca.pendown()
    ca.setheading(0)
    ca.pensize(2)
    ca.speed(10)

def circle(r, color):
    """Draw a circle of the given radius and color"""
    x_point = 0
    y_point = -r
    func_1(x_point, y_point)
    ca.pencolor(color)
    ca.fillcolor(color)
```

```

ca.begin_fill()
ca.circle(r)
ca.end_fill()

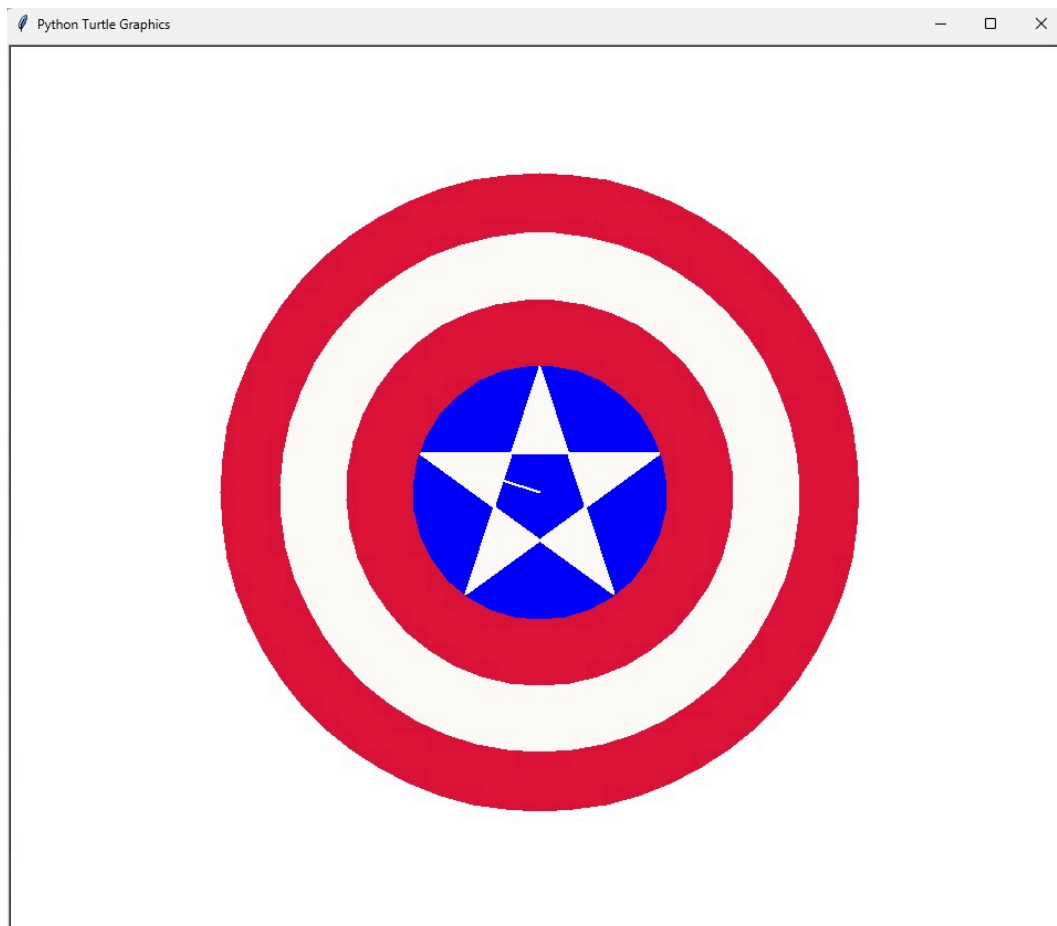
def star(r, color):
    """Draw a star of the given radius and color"""
    func_1(0, 0)
    ca.pencolor(color)
    ca.setheading(162)
    ca.forward(r)
    ca.setheading(0)
    ca.fillcolor(color)
    ca.begin_fill()
    for i in range(5):
        ca.forward(math.cos(math.radians(18)) * 2 * r) # 2cos18°*r
        ca.right(144)
    ca.end_fill()
    ca.hideturtle()

if __name__ == '__main__':
    # Draw concentric circles with different colors
    circle(288, 'crimson')
    circle(234, 'snow')
    circle(174, 'crimson')
    circle(114, 'blue')

    # Draw a star inside the innermost circle
    star(114, 'snow')

    # Finish drawing and keep the window open
    turtle.done()

```



TURTLE DESIGN 4

SPIDYYYY

```
from turtle import *

speed(13) # Painting speed control
bgcolor("#990000")
pensize(10)
penup()
goto(0,50)
pendown()
circle(-120)
penup()
circle(-120,-60)
pendown()
pensize(5)
right(50)
circle(70,55)
right(85)
circle(75,58)
right(90)
circle(70,55)
right(90)
circle(70,58)

# body
penup()
pensize(10)
goto(80,15)
pendown()
seth(92)
fd(135)
seth(125)
circle(30,135)
seth(190)
fd(50)
seth(125)
circle(30,135)
seth(275)
fd(90)

# Arm 1
penup()
pensize(10)
goto(92,-150)
seth(240)
pendown()
fd(80)
left(10)
circle(-28,185)

# Arm 2
penup()
goto(0,50)
seth(0)
pensize(10)
circle(-120,-60)
seth(200)
pendown()
fd(72)
```



```
left(20)
circle(30,150)
left(20)
fd(20)
right(15)
fd(10)
pensize(5)
fillcolor("#3366cc")
begin_fill()
seth(92)
circle(-120,31)
seth(200)
fd(45)
left(90)
fd(52)
end_fill()
fd(-12)
right(90)
fd(40)
penup()
right(90)
fd(18)
pendown()
right(86)
fd(40)
penup()
goto(-152,-86)
pendown()
left(40)
circle(35,90)
# Body coloring
penup()
goto(-80,116)
seth(10)
pensize(5)
pendown()
begin_fill()
fillcolor("#3366cc")
fd(155)
seth(-88)
fd(37)
seth(195)
fd(156)
end_fill()
penup()
goto(-75,38)
seth(15)
pendown()
begin_fill()
fd(158)
seth(-88)
fd(55)
seth(140)
circle(120,78)
end_fill()
# Arm 1 To color
penup()
fillcolor("#3366cc")
pensize(5)
goto(75,-170)
```

```
pendown()
begin_fill()
seth(240)
fd(30)
right(90)
fd(17)
end_fill()
fd(10)
left(80)
fd(55)
penup()
left(90)
fd(15)
pendown()
left(85)
fd(55)
penup()
goto(43,-225)
left(84)
pendown()
circle(60,51)
speed(0)
```

```
# Body vertical lines
for i in range(3):
    penup()
    goto(-70+i*15,135)
    seth(-90)
    pendown()
    pensize(5)
    fd(15-2*i)
```

```
for i in range(3):
    penup()
    goto(36 + i * 15, 156)
    seth(-90)
    pendown()
    pensize(5)
    fd(15 - 2 * i)
    a = -60
    b = 70
```

```
for i in range(4):
    penup()
    goto(a,b)
    a=a+40
    b=b+10
    seth(-90)
    pendown()
    pensize(5)
    fd(26)
```

```
def oo (li,jing):
    penup()
    goto(0,50)
    seth(0)
    circle(-120, li)
    pendown()
    right(jing)
    pensize(5)
```

```
oo(-60,110)
fd(130)
oo(-28,96)
fd(140)
oo(9,89)
fd(144)
oo(42,70)
fd(160)
oo(80,60)
fd(130)
penup()
goto(-80,-40)
right(160)
pendown()
right(50)
circle(70,45)
right(75)
circle(70,38)
right(50)
circle(70,45)
right(90)
circle(70,48)
penup()
goto(-53,-70)
pendown()
left(40)
circle(70,30)
right(50)
circle(70,20)
right(50)
circle(70,38)
right(70)
circle(70,24)
penup()
goto(-19,-105)
left(72)
pendown()
fd(22)
right(60)
fd(22)
oo(-140,80)
circle(-90,120)
penup()
oo(140,100)
circle(90,13)
pendown()
```

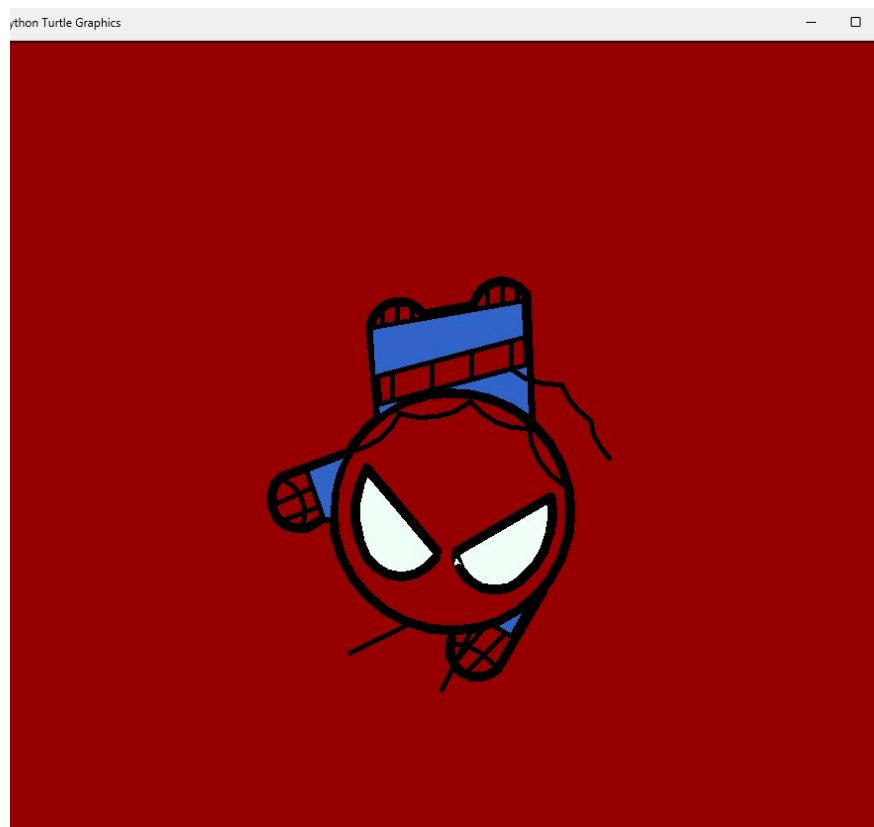
```
right(-50)
circle(70,45)
right(75)
circle(70,38)
right(50)
circle(70,36)
penup()
goto(22,-185)
right(70)
pendown()
fd(72)
penup()
```

```

goto(-40,-182)
right(38)
pendown()
fd(70)
speed(10)
# The left eye
penup()
pensize(7)
goto(-15,-110)
seth(0)
pendown()
pensize(10)
begin_fill()
left(130)
fd(110)
right(250)
circle(90,60)
circle(40,120)
fillcolor("#F5FFFA")
end_fill()

# Right eye
penup()
goto(5,-110)
pendown()
begin_fill()
right(30)
fd(110)
right(-250)
circle(-90,60)
circle(-40,120)
end_fill()
done()

```



TURTLE DESIGN 5