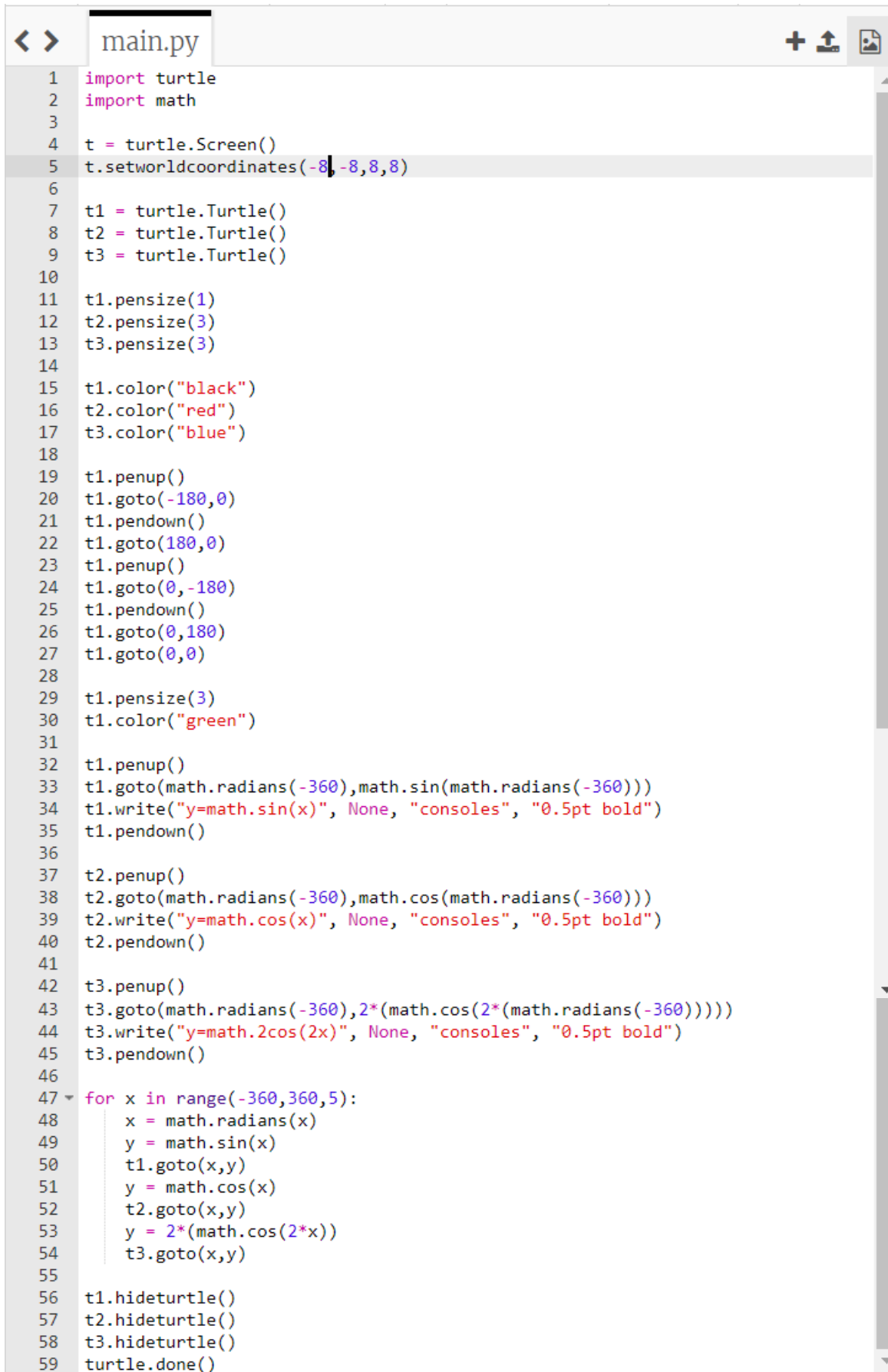


Python 语言基础与应用

K04 绘制三角函数曲线

源代码截图：



```
< > main.py + ↕ 📄
1 import turtle
2 import math
3
4 t = turtle.Screen()
5 t.setworldcoordinates(-8,-8,8,8)
6
7 t1 = turtle.Turtle()
8 t2 = turtle.Turtle()
9 t3 = turtle.Turtle()
10
11 t1.pensize(1)
12 t2.pensize(3)
13 t3.pensize(3)
14
15 t1.color("black")
16 t2.color("red")
17 t3.color("blue")
18
19 t1.penup()
20 t1.goto(-180,0)
21 t1.pendown()
22 t1.goto(180,0)
23 t1.penup()
24 t1.goto(0,-180)
25 t1.pendown()
26 t1.goto(0,180)
27 t1.goto(0,0)
28
29 t1.pensize(3)
30 t1.color("green")
31
32 t1.penup()
33 t1.goto(math.radians(-360),math.sin(math.radians(-360)))
34 t1.write("y=math.sin(x)", None, "consoles", "0.5pt bold")
35 t1.pendown()
36
37 t2.penup()
38 t2.goto(math.radians(-360),math.cos(math.radians(-360)))
39 t2.write("y=math.cos(x)", None, "consoles", "0.5pt bold")
40 t2.pendown()
41
42 t3.penup()
43 t3.goto(math.radians(-360),2*(math.cos(2*(math.radians(-360)))))
44 t3.write("y=math.2cos(2x)", None, "consoles", "0.5pt bold")
45 t3.pendown()
46
47 for x in range(-360,360,5):
48     x = math.radians(x)
49     y = math.sin(x)
50     t1.goto(x,y)
51     y = math.cos(x)
52     t2.goto(x,y)
53     y = 2*(math.cos(2*x))
54     t3.goto(x,y)
55
56 t1.hideturtle()
57 t2.hideturtle()
58 t3.hideturtle()
59 turtle.done()
```

运行结果截图：

