隐藏箭头

人员

李欣齐、刘敦桐、陈嘉琦、王舒颐、王伯安、杨家凝 到课，邢志远、滕宇昂 线上

冯文浠、曹耀坤 请假

上周作业检查

李欣齐 已完成

邢志远 已完成

刘敦桐 已完成

冯文浠 已完成

滕宇昂 已完成

陈嘉琦 已完成

王舒颐 已完成

王伯安 已完成

曹耀坤 未打卡

杨佳凝 已完成

作业

课堂表现

课堂整体纪律不错，希望同学们接下来继续保持。

课堂内容

第一步 ： import turtle 相当于咱们的scratch添加画笔拓展，加了这个才能用。

指令一：前进turtle.forward(步数) 和咱们的scratch的移动几步是一样的，也可以是负数

指令二：右转turtle.right(角度度数) 和咱们的scratch的右转几度是一样的，也可以是负数

指令三：左转turtle.left(角度度数) 和咱们的scratch的左转几度是一样的，也可以是负数

指令四：抬笔turtle.penup() 即 抬笔

指令五：落笔 turtle.pendown() 即 落笔

指令六：移动笔的位置到(x,y)点 ： turtle.goto(x,y) 类似于scratch中的移到（x,y）

指令七：画圆：turtle.circle(半径) 默认逆时针画圆

半径是正数，逆时针画圆

半径是负数，顺时针画圆

指令八：设置画笔的颜色：turtle.pencolor('red') 括号里需要填写颜色的英文单词，用引号引起来

指令九：设置画笔的尺寸：turtle.pensize(100) 括号里需要填写笔的粗细值，默认为1，数字越大，笔就越粗

指令十：设置画圆的角度：turtle.circle(半径，角度)

绘制半径为长度的，弧度为角度的半圆

默认范围为360度，即整圆

指令十一：反方向画半圆：turtle.circle(半径，-角度)

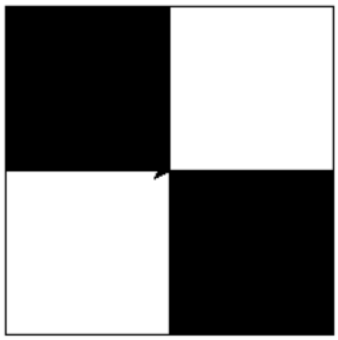
指令十二：画直径为k的实心圆：turtle.dot(k)

指令十三：颜色填充的指令：turtle.fillcolor("green") 指定填充的颜色

```
turtle.begin_fill()
...
turtle.end_fill()
```

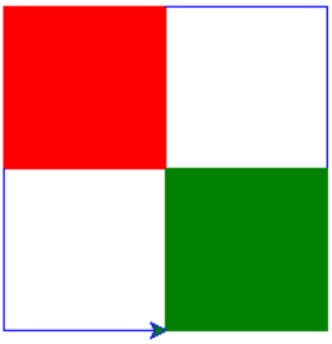
填充的起点和终点

课上案例



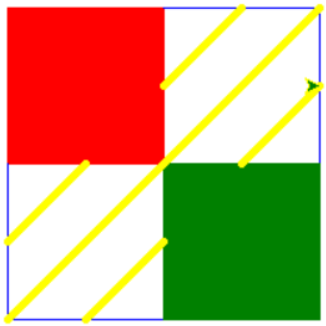
```
import turtle

turtle.forward(200)
turtle.right(90)
turtle.forward(200)
turtle.right(90)
turtle.forward(200)
turtle.right(90)
turtle.forward(200)
turtle.right(90)

turtle.begin_fill()
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.end_fill()

turtle.begin_fill()
turtle.goto(100, -100)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.end_fill()
```

进阶版



```
import turtle

turtle.pencolor("red")
turtle.fillcolor("red")
turtle.begin_fill()
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.end_fill()

turtle.penup()
turtle.goto(100, -100)
turtle.pendown()

turtle.pencolor("green")
turtle.fillcolor("green")
turtle.begin_fill()
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.end_fill()

turtle.penup()
turtle.goto(100, 0)
turtle.pendown()
turtle.pencolor("blue")
turtle.forward(100)
turtle.right(90)
turtle.forward(100)

turtle.penup()
turtle.goto(0, -100)
turtle.pendown()
turtle.pencolor("blue")
turtle.forward(100)
turtle.left(90)
turtle.forward(100)
```

进阶版2

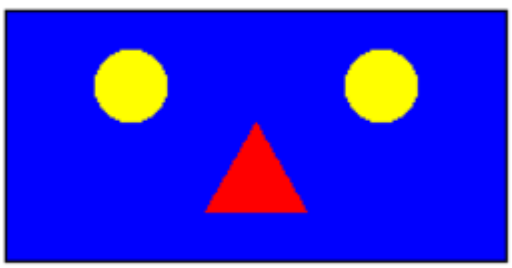


```
import turtle

turtle.pencolor("red")
turtle.fillcolor("red")
turtle.begin_fill()
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.end_fill()

turtle.penup()
turtle.goto(100, -100)
turtle.pendown()

turtle.pencolor("green")
turtle.fillcolor("green")
turtle.begin_fill()
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.end_fill()

turtle.penup()
turtle.goto(100, 0)
turtle.pendown()
turtle.pencolor("blue")
turtle.forward(100)
turtle.right(90)
turtle.forward(100)

turtle.penup()
turtle.goto(0, -100)
turtle.pendown()
turtle.pencolor("blue")
turtle.forward(100)
turtle.left(90)
turtle.forward(100)

turtle.pensize(5)
turtle.pencolor("yellow")
```

```
turtle.penup()
turtle.goto(0, -150)
turtle.pendown()
turtle.goto(50, -100)

turtle.penup()
turtle.goto(0, -200)
turtle.pendown()
turtle.goto(100, -100)

turtle.penup()
turtle.goto(50, -200)
turtle.pendown()
turtle.goto(100, -150)

turtle.penup()
turtle.goto(100, -50)
turtle.pendown()
turtle.goto(150, 0)

turtle.penup()
turtle.goto(100, -100)
turtle.pendown()
turtle.goto(200, 0)

turtle.penup()
turtle.goto(150, -100)
turtle.pendown()
turtle.goto(200, -50)
```

新内容

```
可以 隐藏箭头 和 展示箭头 的指令
turtle.hideturtle(): 隐藏箭头
turtle.showturtle(): 展示箭头
```



```
import turtle

turtle.fillcolor("blue")
turtle.begin_fill()
turtle.forward(200)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(200)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.end_fill()

turtle.penup()
turtle.goto(50, -30)
turtle.pendown()
turtle.pencolor("yellow")
turtle.dot(30)

turtle.penup()
turtle.goto(150, -30)
turtle.pendown()
turtle.pencolor("yellow")
turtle.dot(30)

turtle.penup()
turtle.goto(100, -45)
turtle.pendown()

turtle.pencolor("red")
turtle.fillcolor("red")
turtle.begin_fill()
turtle.right(60)
turtle.forward(40)
turtle.right(120)
turtle.forward(40)
turtle.right(120)
turtle.forward(40)
turtle.end_fill()

turtle.hideturtle()
```