画实心圆

人员

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上周作业检查

李欣齐 已完成

邢志远 已完成

刘敦桐 未完成，下周会补

冯文浠 已完成

滕宇昂 已完成

陈嘉琦 已完成

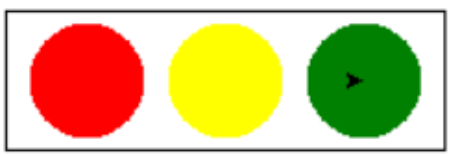
王舒颐 已完成

王伯安 已完成

曹耀坤 已完成

杨佳凝 已完成

作业



外面长方形的边长，内部红绿灯的半径，同学们都可以自己定义

课堂表现

大部分同学上课听讲很认真，课堂纪律也很好，希望同学们继续保持。

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

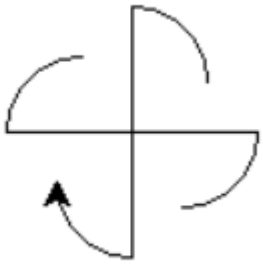
指令十：设置画圆的角度：turtle.circle(半径，角度)

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

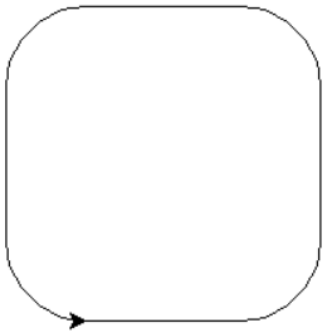
指令十一：反方向画半圆：turtle.circle(半径，-角度)

作业讲解



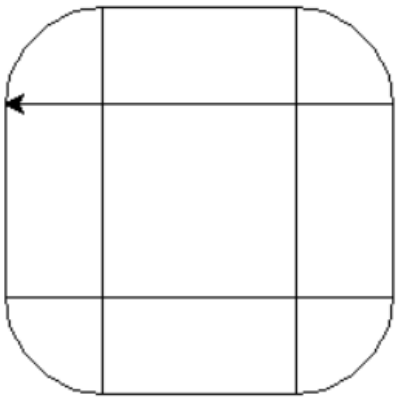
```
import turtle

turtle.left(180)
turtle.forward(50)
turtle.right(90)
turtle.circle(-30, 90)
turtle.circle(-30, -90)
turtle.right(90)
turtle.forward(50)

turtle.left(90)
turtle.forward(50)
turtle.right(90)
turtle.circle(-30, 90)
turtle.circle(-30, -90)
turtle.right(90)
turtle.forward(50)

turtle.left(90)
turtle.forward(50)
turtle.right(90)
turtle.circle(-30, 90)
turtle.circle(-30, -90)
turtle.right(90)
turtle.forward(50)

turtle.left(90)
turtle.forward(50)
turtle.right(90)
turtle.circle(-30, 90)
```

课上案例



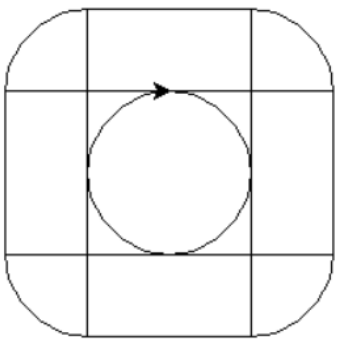
```
import turtle

turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)
```

进阶版1



```
import turtle

turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)

turtle.left(90)
turtle.forward(200)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(200)

turtle.right(90)
turtle.forward(100)
turtle.circle(-50, 90)
turtle.right(90)
turtle.forward(200)
turtle.left(90)
turtle.forward(100)
turtle.left(90)
turtle.forward(200)
```

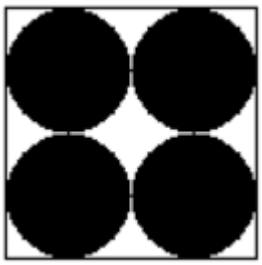
进阶版2



```
import turtle

turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)
turtle.forward(100)
turtle.circle(50, 90)

turtle.left(90)
turtle.forward(200)
turtle.right(90)
turtle.forward(100)
turtle.right(90)
turtle.forward(200)

turtle.right(90)
turtle.forward(100)
turtle.circle(-50, 90)
turtle.right(90)
turtle.forward(200)
turtle.left(90)
turtle.forward(100)
turtle.left(90)
turtle.forward(200)

turtle.left(180)
turtle.forward(100)
turtle.circle(-50)
```

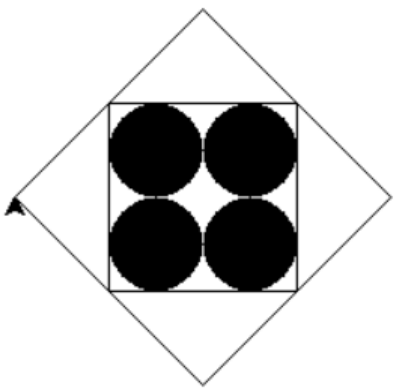
新内容

```
画实心圆
turtle.dot(100): 以当前所在点为圆心，画一个直径为100的实心圆
```

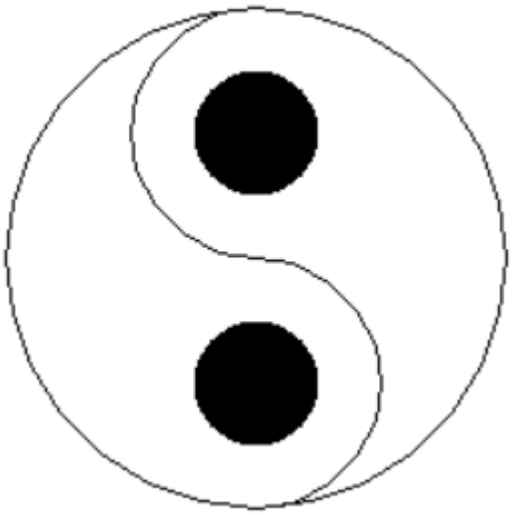


```
import turtle

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.penup()
turtle.goto(25, -25)
turtle.pendown()

turtle.dot(50)
turtle.forward(50)
turtle.dot(50)
turtle.right(90)
turtle.forward(50)
turtle.dot(50)
turtle.right(90)
turtle.forward(50)
turtle.dot(50)
turtle.right(90)
turtle.forward(50)
```

进阶版



```
import turtle

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.penup()
turtle.goto(25, -25)
turtle.pendown()

turtle.dot(50)
turtle.forward(50)
turtle.dot(50)
turtle.right(90)
turtle.forward(50)
turtle.dot(50)
turtle.right(90)
turtle.forward(50)
turtle.dot(50)
turtle.right(90)
turtle.forward(50)

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



```
import turtle

turtle.circle(-50, 180)
turtle.circle(-50, -180)
turtle.right(180)
turtle.circle(-50, 180)
turtle.circle(-100)

turtle.right(90)
turtle.penup()
turtle.forward(50)
turtle.pendown()
turtle.dot(50)

turtle.penup()
turtle.forward(100)
turtle.pendown()
turtle.dot(50)
```