

# Python Turtle

**講義網址：**

**<https://ppt.cc/fNUV9x>**

**Python Turtle Documentation:**

**<https://docs.python.org/3/library/turtle.html>**

**常用指令：**

**[https://github.com/vcdemy/python\\_beginners/blob/main/commands.md](https://github.com/vcdemy/python_beginners/blob/main/commands.md)**

# Basic Syntax

```
import turtle
```

```
import turtle
```

```
turtle.forward(100)
```

```
turtle.left(90)
```

註解 (Comment)

# 載入模組

```
import turtle
```

```
turtle.forward(100)
```

```
turtle.left(90)
```

**for** Loops

```
import turtle
```

```
turtle.forward(100)
```

```
turtle.left(90)
```

```
turtle.forward(100)
```

```
turtle.left(90)
```

```
turtle.forward(100)
```

```
turtle.left(90)
```

```
turtle.forward(100)
```

```
turtle.left(90)
```



```
import turtle
```

```
for i in range(4):
```

```
    turtle.forward(100)
```

```
    turtle.left(90)
```



```
import turtle
```

```
for i in range(4):
```

```
→ turtle.forward(100)
```

```
→ turtle.left(90)
```

functions

```
import turtle
```

```
def polygon():  
    for i in range(4):  
        turtle.forward(100)  
        turtle.left(90)
```

函式定義  
Function Definition

```
polygon()
```

函式呼叫  
Function Call

```
import turtle
```

```
def polygon():
```

```
    for i in range(4):
```

```
        turtle.forward(100)
```

```
        turtle.left(90)
```

```
polygon()
```

```
import turtle
```

```
def polygon(n):  
    for i in range(n):  
        turtle.forward(50)  
        turtle.left(360/n)
```

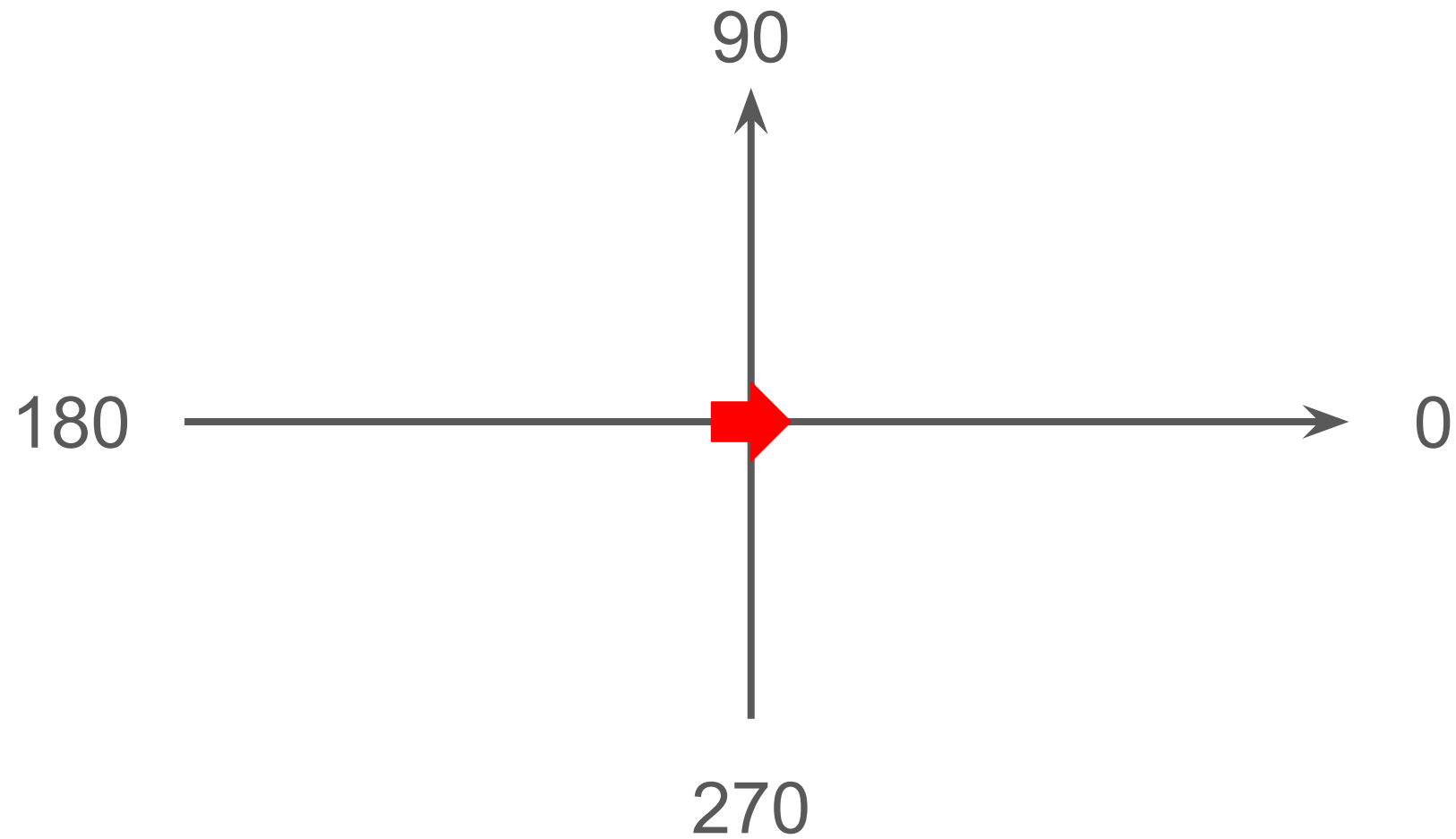
```
polygon(5)
```

```
import turtle
```

```
def polygon(n, m):  
    for i in range(n):  
        turtle.forward(m)  
        turtle.left(360/n)
```

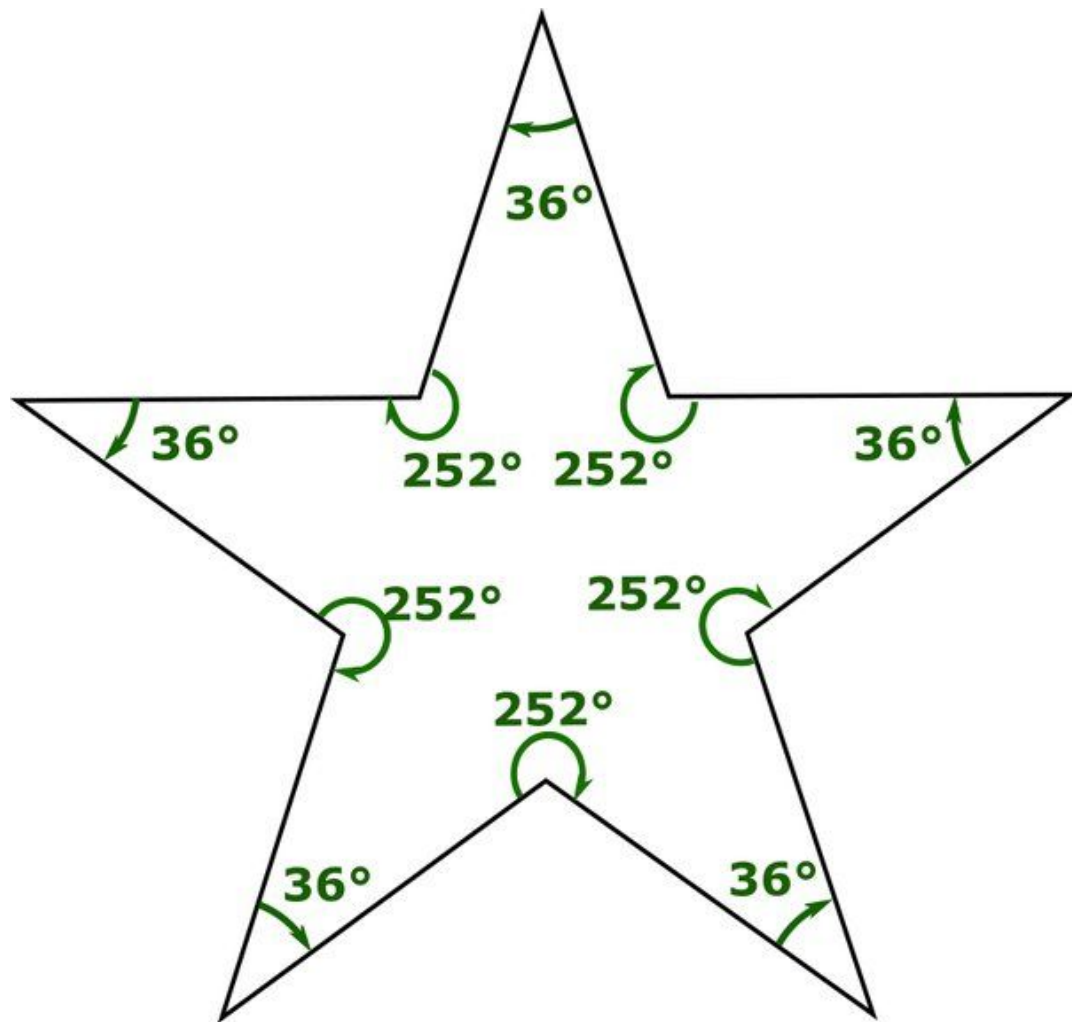
```
polygon(5, 50)
```

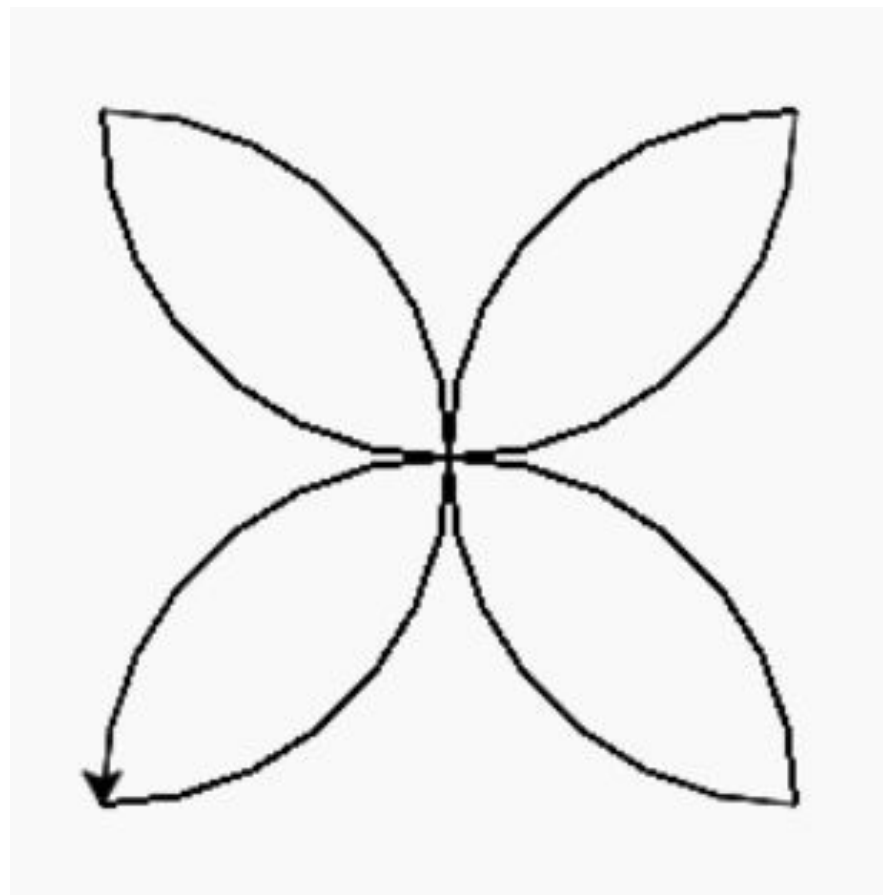
# Turtle Heading

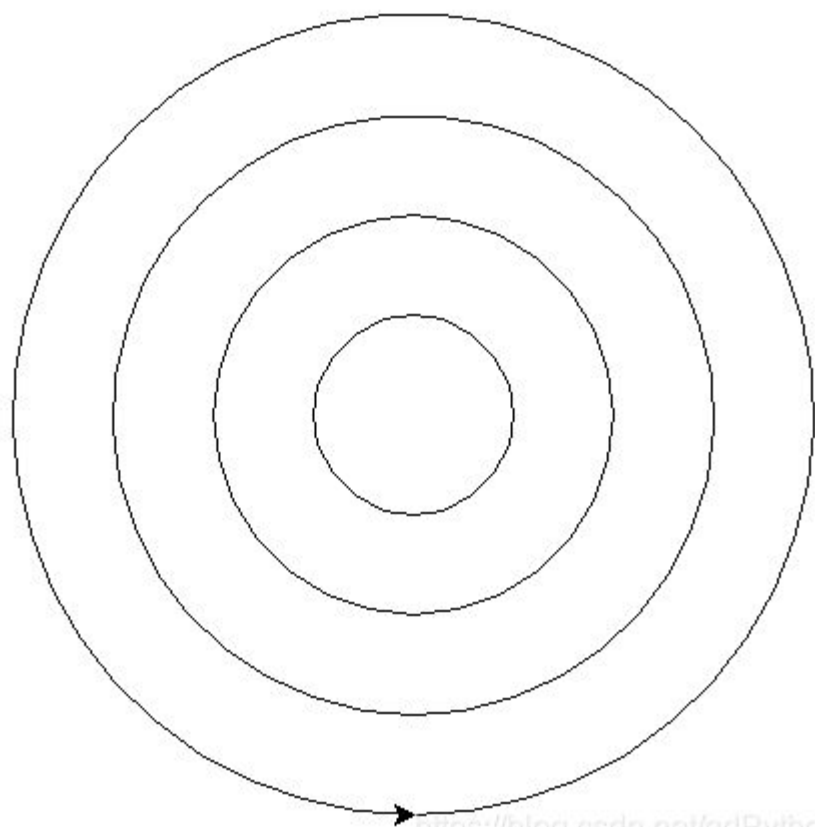




# Challenges







<https://blog.csdn.net/qdPython>

