

Meeting Turtle

Imagine a little turtle that follows your commands to draw what you imagine. That's exactly what the Turtle library in Python does! It allows you to create cool drawings with simple commands.

Basic Turtle Commands

The Turtle library in Python provides several basic commands for creating simple drawings. Here are some of the most commonly used commands to create a variety of drawings by combining movements, rotations, and style changes:

```
import turtle
```

```
# Create a new turtle  
t = turtle.Turtle()
```

```
# Move the turtle forward by a certain distance  
t.forward(100)
```

```
# Move the turtle backward by a certain distance  
t.backward(50)
```

```
# Turn the turtle to the right by a certain angle  
t.right(90)
```

```
# Turn the turtle to the left by a certain angle  
t.left(45)
```

```
# Lift the pen, allowing the turtle to move without drawing  
t.penup()
```

```
# Lower the pen, allowing the turtle to draw while moving  
t.pendown()
```

```
# Set the color of the turtle's line  
t.color("blue")
```

```
# Set the width of the turtle's line  
t.width(2)
```

```
# Draw a circle with a specified radius  
t.circle(50)
```

```
# Move the turtle to a specified position (x, y)  
t.goto(100, 100)
```

```
# Clear the current drawing of the turtle  
t.clear()
```

```
# Reset the turtle to its original position and clear the drawing
```

```
t.reset()
```

```
# Hide the turtle
```

```
t.hideturtle()
```

```
# Show the turtle if it is hidden
```

```
t.showturtle()
```

```
# Close the Turtle graphics window when clicked
```

```
turtle.done()
```

Let's Draw a Square

```
from turtle import *
```

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

```
    forward(100)
```

```
    left(90)
```

```
done()
```

Adding Color

```
from turtle import *
```

```
color("blue")
```

```
begin_fill()
```

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

```
    forward(100)
```

```
    left(90)
```

```
end_fill()
```

```
done()
```

Changing the Background

```
from turtle import *
```

```
bgcolor("yellow")
```

```
for _ in range(36):
```

```
    forward(100)
```

```
    left(170)
```

```
done()
```

Drawing a Circle

In this example, a turtle is created, its color is set to "blue," and then it draws a circle with a radius of 100. The Turtle window will remain open until the user clicks on it.

```
import turtle
```

```
# Create a turtle
```

```
t = turtle.Turtle()

# Choose a color
t.color("blue")

# Draw a circle with a radius of 100
t.circle(100)

# Close the window when clicked
turtle.exitonclick()
```

Colors with Turtle

The Turtle library in Python allows you to create simple graphics using a turtle that moves on the screen. Here are some basic colors you can use with Turtle:

```
"black"
"white"
"gray"
"red"
"green"
"blue"
"cyan"
"magenta"
"yellow"
"orange"
"brown"
"pink"
"purple"
```

In addition to these basic colors, Turtle also supports color combinations in hexadecimal form, such as "#RRGGBB," where RR, GG, and BB represent the hexadecimal values for the red, green, and blue components, respectively.

Here's an example of some additional colors with hexadecimal values:

```
import turtle

t = turtle.Turtle()

# Basic colors
t.color("black")
t.forward(50)

t.color("white")
t.forward(50)

t.color("gray")
t.forward(50)

t.color("red")
t.forward(50)

t.color("green")
t.forward(50)
```

```

t.color("blue")
t.forward(50)

# Hexadecimal colors
t.color("#FFD700") # Golden Yellow
t.forward(50)

t.color("#8A2BE2") # Purple
t.forward(50)

t.color("#00FFFF") # Cyan
t.forward(50)

turtle.done()

```

Draw the flag of Morocco with Turtle

Github : [Code Source](#)

```

"""
    Draw the flag of Morocco using the Turtle graphics library.
    param size: Size of the flag (dimension of the rectangle side)
    param color: Background color of the rectangle
"""

```

```

__author__ = "Larbi OUIYZME"
__version__ = "1.0"

```

```

import turtle

```

```

def draw_morocco_flag(size, color):

```

```

    # Initialize a turtle named "pen"
    pen = turtle.Turtle()

```

```

    # Set the shape of the turtle
    pen.shape("turtle")

```

```

    # Set the color of the turtle
    pen.color(color)

```

```

    # Set the speed of the turtle
    pen.speed(1)

```

```

    # Set the width of the turtle's pen
    pen.width(13)

```

```

    # Position the turtle to the initial position
    pen.goto(-150, 0)

```

```

    # Use a loop to draw the five stars
    # Utiliser une boucle pour dessiner les cinq étoiles

```

```
# استخدام حلقة لرسم النجوم الخمس
i = 0
while i < 5:
    pen.forward(size)
    pen.right(180 * 4 / 5) # pen.right(144)
    i += 1

# Hide the turtle at the end of the drawing
pen.hideturtle()

# Create a window for the flag
window = turtle.Screen()

# Set the background color of the window
window.bgcolor("red")

# Title of the window in different languages
window.title("Kingdom of Morocco - Royaume du Maroc - المملكة المغربية الشريفة - Reino de Marruecos")

# Call the function to draw the flag with a size of 250 and a green color
draw_morocco_flag(250, "green")

# Wait for the user to click to close the window
window.exitonclick()
```