🐢 Python Turtle Syntax 🐢

To use the turtle library,

```
import turtle
```

Instantiate a Turtle object

The object's name is pat.

```
pat = turtle.Turtle()
```

Move

Move forward 100 steps:

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

Turn left 120 degrees:

```
turtle.left(120)
```

Send your turtle back to its starting-point (useful if it has disappeared off-screen).
Home x, y coordinates are (0, 0)

```
turtle.home()
```

Get the turtle's current location (x, y).

```
turtle.pos()
```

Pen control

Pull the pen down – drawing when moving.

```
turtle.pendown()
```

Pull the pen up – no drawing when moving.

```
turtle.penup()
```

Set the line thickness. The example below sets the line thickness to 10.

```
turtle.pensize(10)
```

Color control

Set the pen color.

```
turtle.pencolor(*args)

turtle.pencolor("red")
turtle.pencolor("#33cc8c")
```

Set color mode to use R, G, B, color values (0 to 255)

```
colormode(255)
turtle.pencolor(r, g, b)
```

Set fill color:

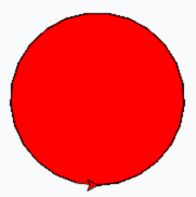
```
turtle.fillcolor(*args)
```

Set pen color and fill color at once:

```
turtle.color(*args)
turtle.color("red", "green")
```

Filling in shape:

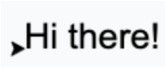
```
turtle.color("black", "red")
turtle.begin_fill()
turtle.circle(80)
turtle.end_fill()
```



Write text:

```
turtle.write(arg, move=False,
align='left', font=('Arial', 8,
'normal'))

turtle.write("Hi there!
",font=('Arial', 20))
```



Shape

Set the turtle's shape - "arrow", "turtle", "circle", "square", "triangle", "classic"

```
turtle.shape("turtle")
```

Using Events

Have the turtle turn left when the left arrow key is pressed. Get screen and listen for events.

```
screen = turtle.getscreen()
def turn_left():
    pat.left(90)

screen.onkey(turn_left, "Left")
screen.listen()
```