

Introduction

This code will generate a gradient art piece through the use of overlapping lines of various colors.

Tasks

1. Create a few different turtles for each hue of a few different colors
2. Generate curved lines for each hue of those different colors
3. Create a specific set of positions for each color hue
 - a. Light green will have positions that go from (0,50) to (0,100)
 - b. Dark green will have positions that go from (0,100) to (0,150)
 - c. Light blue will have positions that go from (0,150) to (0,200)
 - d. Dark blue will have positions that go from (0,200) to (0,250)
 - i. Ideally these starting position coordinates will overlap with one another
4. Generate various colors and hues for each turtle using a specific preset list of colors but use them randomly each time using random library

The Important Stuff

Import the turtle and random libraries

Create the turtles and name them because why not

```
gato = turtle.Turtle()
crew = turtle.Turtle()
jude = turtle.Turtle()
```

Establish two lists of colors that the turtles can use to draw lines

```
random.choice(greenBlueList)
random.choice(redOrangeList)
random.choice(pinkPurpleList)
```

Define the color lists

```
greenBlueList = ["DarkOliveGreen1", "Light Green", "Pale Green",
"PowderBlue", "LightSkyBlue", "Cyan4"]

redOrangeList = ["Brown1", "DarkRed", "Coral1", "Coral4", "IndianRed1",
etc.]

pinkPurpleList = ["pink", "purple", "magenta", etc.]
```

Send **gato** to draw lines of x color between coordinates (0,0) and (0,50)

Use randint function

Send **crew** to draw lines of x color between coordinates (0,40) and (0,100)

Use randint function

Send **jude** to draw lines of x color between coordinates (0,90) and (0,150)

Use randint function

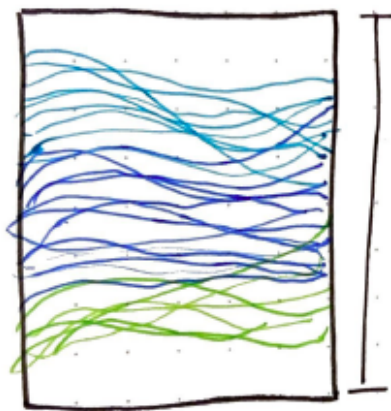
Use for loop to draw lines across the screen

```
For i in range(30):  
    jude.forward(100)  
    jude.up()  
    jude.goto(x,y)  
    jude.down()
```

```
For i in range(30):  
    crew.forward(100)  
    crew.up()  
    crew.goto(x,y)  
    crew.down()
```

```
For i in range(30):  
    gato.forward(100)  
    gato.up()  
    gato.goto(x,y)  
    gato.down()
```

Vision



250

A Few shades
of green & blue

600

Blue
↓
Green

Gradient + intersection