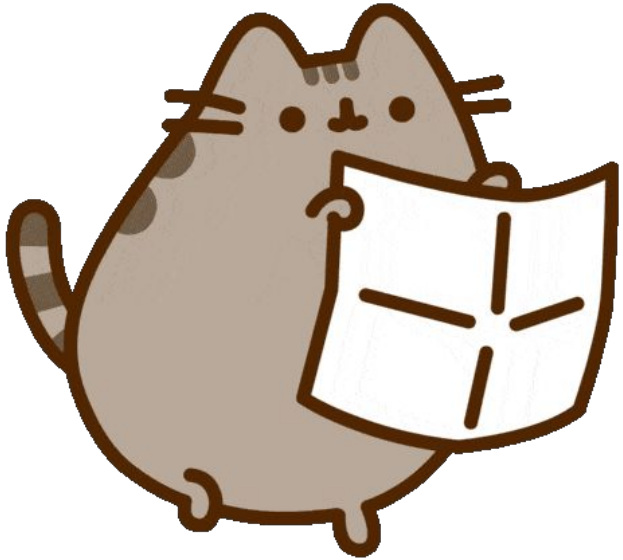
# Canvas Reference

| |
|---|
| `canvas.create_line(x1, y1, x2, y2)` |
| `canvas.get_canvas_width()` |
| `canvas.get_canvas_height()` |
| `canvas.create_text(x, y, text)` |
| `canvas.create_text(x, y, text)` |
| `canvas.get_random_color()` |
| `canvas.set_fill_color(shape, color)` |
| `canvas.set_outline_color(shape, color)` |

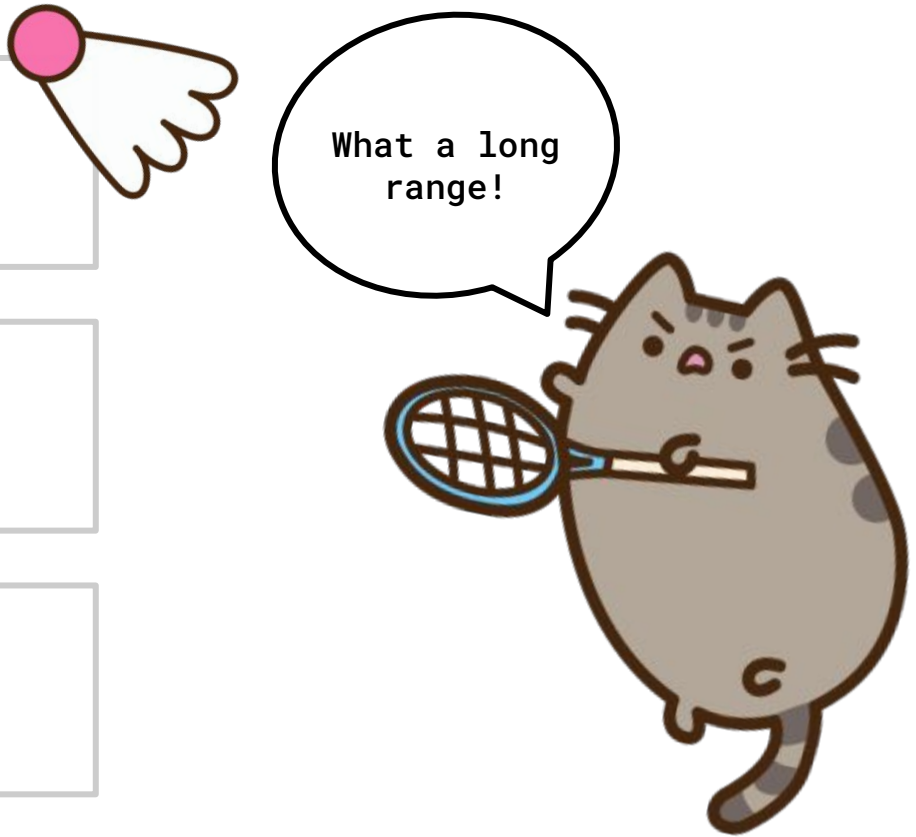


# Range Loops

```
def print_nums():
    for i in range(10):
        print(i) # prints 0-9
```

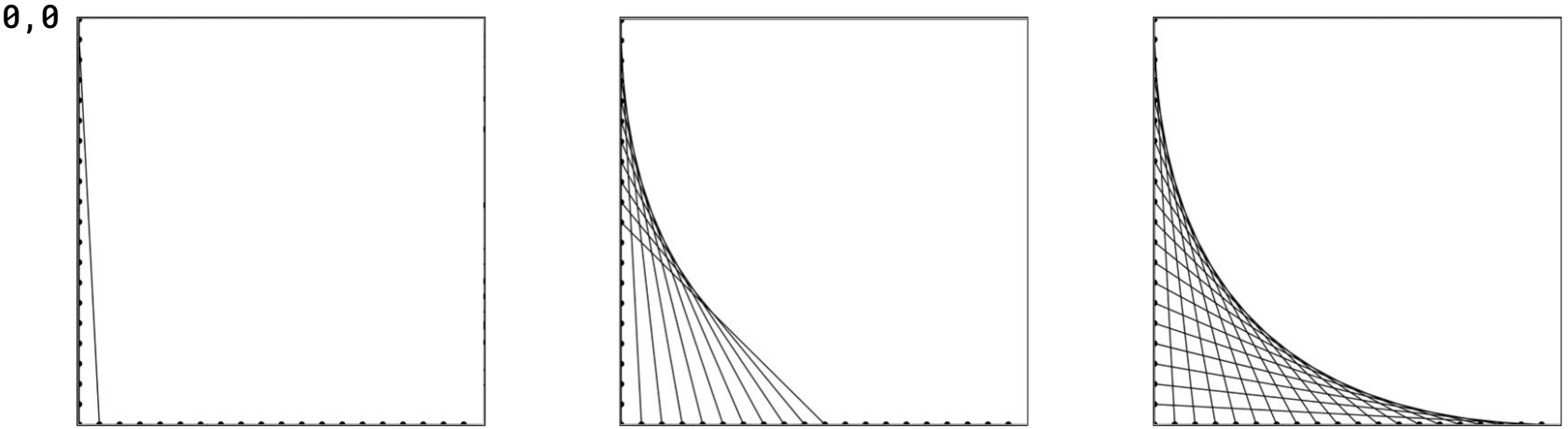
```
def print_nums():
    for i in range(10):
        print(i + 1) # prints ?
```

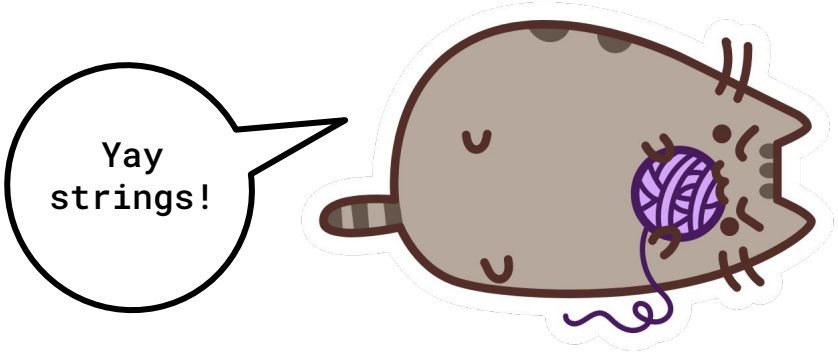
```
def print_nums():
    for i in range(10, 20):
        print(i) # prints 10-19
```



# Section Problem

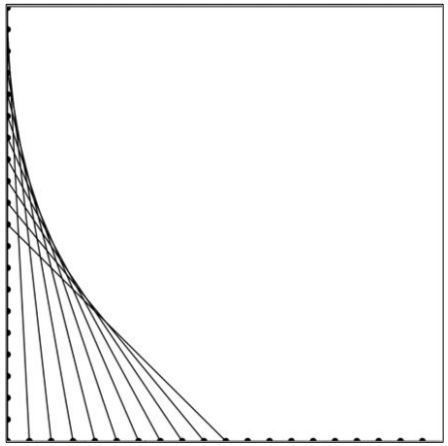
# String Art



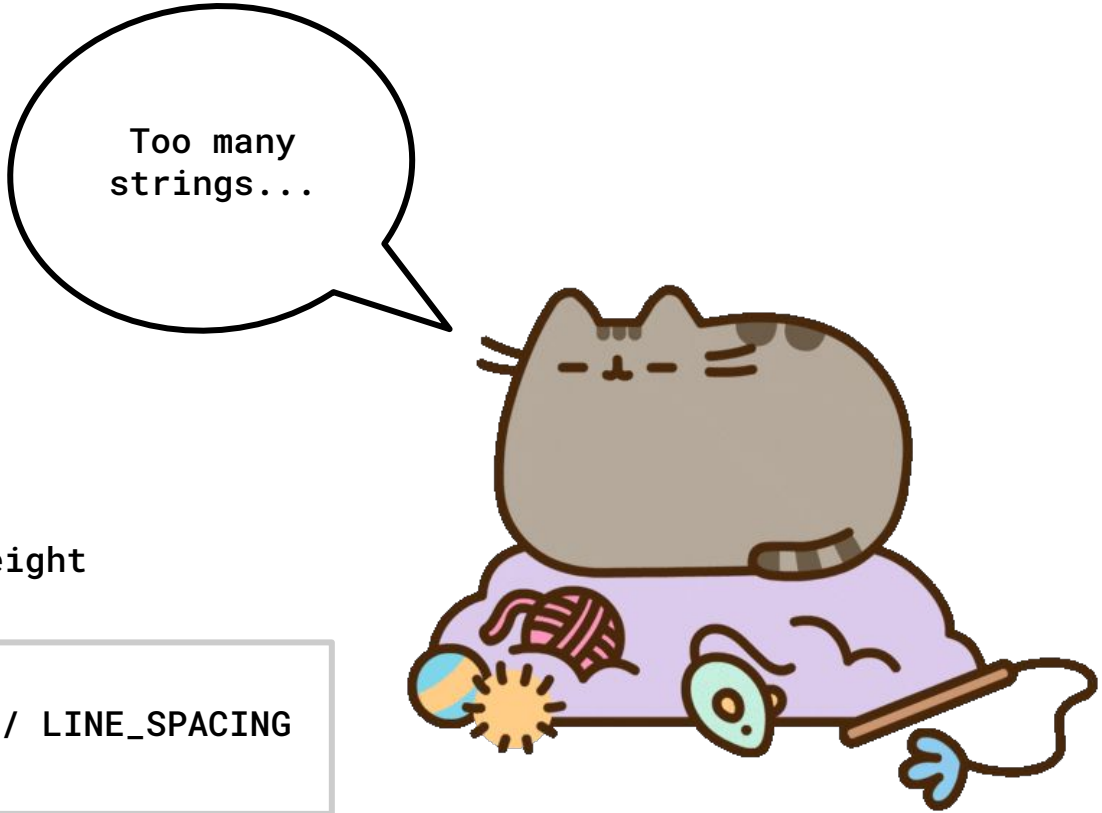



# String Art

0,0

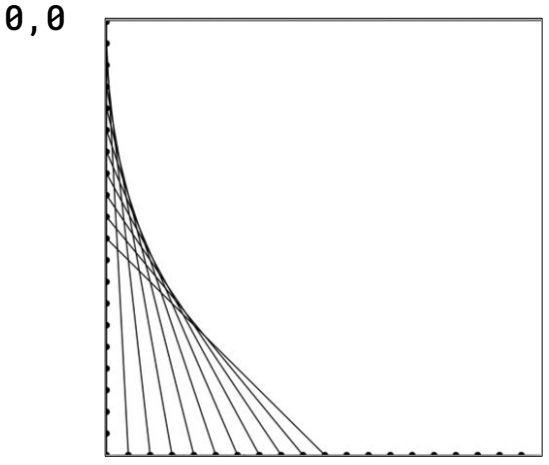


height, height




```
LINE_SPACING = 20
NUM_LINES = CANVAS_WIDTH // LINE_SPACING
```

# String Art




```
for i in range(NUM_LINES):
    # draw a line
```


```
LINE_SPACING = 20
NUM_LINES = CANVAS_WIDTH // LINE_SPACING
```

# Quickstart

# Programming is Awesome