QND Computer Science Day 13

Mr. Schmidt

Today

- Final Project
- Custom Colors
- Functions!

Custom Colors

- Hex codes
- RGB values
- Must download new template

```
turtle.lineColor(.hex("daf542"))
turtle.lineColor(.rgb(red: 245, green: 66, blue: 66))
```

Functions

- Repeating code is annoying
- Functions help keep things organized!

```
func 1() {
    turtle.arc(radius: 40, angle: 80)
    turtle.forward(210)
    turtle.arc(radius: 10, angle: 190)
    turtle.forward(205)
    turtle.arc(radius: 40, angle: 90)
}
```

Function Parameters

Reuse code with different values!

```
func flower(petals: Int, radius: Double) {
   let petalSpacing = 360.0 / Double(petals)
   for i in 0..<petals {
      turtle.arc(radius: radius, angle: petalSpacing)
      turtle.rotate(180-petalSpacing)
      turtle.arc(radius: radius, angle: petalSpacing)
      turtle.rotate(180)
   }
}</pre>
```

Final Project Requirements

- Put in a solid effort for the rest of the week
- Make something unique -- don't just copy my examples
- Use a function to repeat code
 - Bonus points if you can use a parameter!