

QND Computer Science Day 13

Mr. Schmidt

Today

- Final Project
- Functions!

Functions

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

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

```
l()
```

```
l()
```

Function Parameters

- Reuse code with different values!

```
func flower(turtle: TurtleHandle, 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)  
    }  
}
```

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!