

QND Computer Science Day 14

Mark Schmidt

Recap

- Wordle
 - Guess Count
 - Random word
 - Validate word length
 - Validate word is a real word

One Last Thing...

- Our code is getting really messy
- We need a better way to organize and isolate different components

Let's make some Functions

- Blocks of code that can be reused
- You've used them already!

```
print("Hello, World!")  
let userString = readLine()!  
let userNumber = Int(userString)!
```

Defining Functions

- Use `func`
- Name
- Parameters
- Return type
- Function Body

```
func square(number: Int) -> Int {  
    return number * number  
}
```

```
print(square(number: 5))
```

Empty Parameters / Return Type

- Parameters are not necessary
- Return type is not necessary

```
func sayHello() {  
    print("Hello! 🐘")  
}
```

Grading a Guess

```
func gradeGuess(guess: String, secret: String) -> String {  
    var output = ""  
  
    // Check each character, adding to output  
    for index in 0 ..< secret.count {  
        let secret_letter = secret[index]  
        let guess_letter = guess[index]  
        if secret_letter == guess_letter {  
            output += String(guess_letter).green()  
        } else if secret.contains(guess_letter) {  
            output += String(guess_letter).yellow()  
        } else {  
            output += String(guess_letter)  
        }  
    }  
    return output  
}
```