# **Notes**

My notes contain fragments from Paul Hudson's blog: https://www.hackingwithswift.com/100/swiftui

# Day 1 & 2 Recap

```
var myString = "This is my string"
print(myString.count)
print(myString.uppercased())

let number = 120
print(number.isMultiple(of: 3))

let filename = "paris.jpg"
print(filename.hasSuffix(".jpg"))
print(filename.hasPrefix("paris"))

var gameOver = false
gameOver.toggle()
```

# Day 3 Recap

### Arrays

Swift makes sure the array only contains one type of data at a time.

```
var beatles = ["John", "Paul", "George", "Ringo"]
beatles.append("Adrian")
```

Starting with an empty array:

```
var scores = Array<Int>() // or var scores = [Int]()
scores.append(100)
scores.append(80)
scores.append(85)

scores.count
scores.remove(at: 2)
scores.removeAll()

let bondMovies = ["Casino Royale", "Spectre", "No Time To Die"]
print(bondMovies.contains("Frozen")) //false

let cities = ["London", "Tokyo", "Rome", "Budapest"]
print(cities.sorted()) // ["Budapest", "London", "Tokyo"]
```

### Dictionaries

https://developer.apple.com/documentation/swift/dictionary

"Subscripting a dictionary with a key returns an optional value, because a dictionary might not hold a value for the key that you use in the subscript."

We can provide a default value to use if the key doesn't exist:

```
print(employee2["name", default: "Unknown"])
```

Creating new dictionary:

```
var heights = [String: Int]()
heights["Yao Ming"] = 229
heights["Shaquille O'Neal"] = 216
heights["LeBron James"] = 206
```

Count and removeAll() both exists for dictionaries, and work just like they do for arrays.

#### Sets

Sets are similar to arrays, except you can't add duplicate items, and they don't store their items in a particular order.

```
let people = Set(["Denzel Washington", "Tom Cruise", "Nicolas Cage", "Samuel L Jackson"])

var people = Set<String>()
people.insert("Denzel Washington")
people.insert("Tom Cruise")
people.insert("Nicolas Cage")
people.insert("Samuel L Jackson")
```

Alongside contains(), you'll also find count to read the number of items in a set, and sorted() to return a sorted array containing the the set's items.

#### Enums

```
enum Weekday {
    case monday
    case tuesday
    case wednesday
    case thursday
    case friday
}
var day = Weekday.monday
day = Weekday.tuesday
day = Weekday.friday
```

Once you assign a value to a variable or constant, its data type becomes fixed – you can't set a variable to a string at first, then an integer later on. Well, for enums this means you can skip the enum name after the first assignment, like this:

```
var day = Weekday.monday
day = .tuesday
day = .friday
```