# Intermediate Swift

Part 4: Extensions

#### **Extensions**

- Extensions add new functionality to classes, structs, and enums.
- You can extend types if even you don't have the source.
- Extensions are equivalent to Categories in Objective-C.



### Extensions (cont'd)

Defining an extension

```
extension String {}
```

Implementing a protocol

```
extension String: MyProtocol { }
```

Add computed properties (no stored properties)

```
extension String {
   var withExcitement: String { return self + "!" }
}
```

raywenderlich.com

#### Extensions (cont'd)

Defining an method

```
extension String {
   func withExcitement() -> String {
     return self + "!"
   }
}
```

Mutating method on a value type

```
extension String {
    mutating func withExcitement() -> String {
        self = self.lowercaseString + "!"
        return self
    }
}
```

#### Demo



## Challenge Time!

10.toPoint() // (x:10, y:10)



