

TEB



iOS Programlama Eğitimi 2. Gün

Enumerations



```
1. enum CompassPoint {  
2.     case North  
3.     case South  
4.     case East  
5.     case West  
6. }  
7.
```

Enumerations



1. `var direction = CompassPoint.North`
2. `direction = .West`

Enumerations



1. `enum Planet {`
2. `case Mercury, Venus, Earth, Mars, Jupiter`
3. `case Saturn, Uranus, Neptune`
4. `}`

Enumerations



```
1. switch directionToHead {  
2.   case .North:  
3.     println("Lots of planets have a north")  
4.   case .South:  
5.     println("Watch out for penguins")  
6.   case .East:  
7.     println("Where the sun rises")  
8.   case .West:  
9.     println("Where the skies are blue")  
10. }
```

Enumerations



```
1. enum Barcode {  
2.     case UPCA(Int, Int, Int, Int)  
3.     case QRCode(String)  
4. }
```

Enumerations



1. `var productBarcode = Barcode.UPCA(8, 8509, 126, 3)`
2. `productBarcode = .QRCode("ABCDEFGHIJOP")`

Enumerations



```
1. switch productBarcode {  
2.   case let .UPCA(numberSystem, manufacturer, product, check):  
3.     println("UPC-A: \(numberSystem), \(manufacturer).")  
4.   case .QRCode(let productCode):  
5.     println("QR code: \(productCode).")  
6. }
```


Enum Raw Values



- `enum ASCIIControlCharacter: Character {`
- `case Tab = "\t"`
- `case LineFeed = "\n"`
- `case CarriageReturn = "\r"`
- `}`

Enum Raw Values



- `enum Planet: Int {`
- `case Mercury = 1, Venus, Earth, Mars, Jupiter,`
 `Saturn, Uranus, Neptune`
- `}`

Enum Raw Values



- `let earthsOrder = Planet.Earth.rawValue`
- `// earthsOrder = 3`

- `let possiblePlanet = Planet(rawValue:7)`
- `// possiblePlanet'in tipi Planet? ve değeri Planet.Uranus`

Enum Raw Values



```
1. let gezegenNo = 9
2. if let somePlanet = Planet(rawValue:gezegenNo) {
3.     switch somePlanet {
4.     case .Earth:
5.         println("Dünyamız 😊")
6.     default:
7.         println("Dünya dışında bi gezegen işte")
8.     }
9. } else {
10.     println("\(gezegenNo) nolu bir gezegen yok!")
11. }
```

Structures



```
1. struct Paragraph {  
2.     var text : [String]  
3.     var level : Int  
4. }
```

```
5. var myParagraph = Paragraph(text:  
6. ["This is the first sentence in my paragraph.",  
7. "This is the second sentence in my paragraph."  
8. ], level:1)
```

Struct vs Class



1. `class SomeClass {`
2. `var name: String`
3. `init(name: String) {`
4. `self.name = name`
5. `}`
6. `}`

7. `var aClass = SomeClass(name: "Bob")`
8. `var bClass = aClass // aClass and bClass now reference the same instance!`
9. `bClass.name = "Sue"`

10. `println(aClass.name) // "Sue"`
11. `println(bClass.name) // "Sue"`

Struct vs Class



1. `struct SomeStruct {`
2. `var name: String`
3. `init(name: String) {`
4. `self.name = name`
5. `}`
6. `}`

7. `var aStruct = SomeStruct(name: "Bob")`
8. `var bStruct = aStruct // aStruct and bStruct are two structs with`
`the same value!`
9. `bStruct.name = "Sue"`

10. `println(aStruct.name) // "Bob"`
11. `println(bStruct.name) // "Sue"`

Protocols



```
1. protocol ExampleProtocol {  
2.     var simpleDescription: String { get }  
3.     mutating func adjust()  
4. }
```


Adopting Protocol



```
1. class SimpleClass: ExampleProtocol {  
2.     var simpleDescription: String = "A very simple  
   class."  
3.     var anotherProperty: Int = 69105  
4.     func adjust() {  
5.         simpleDescription += " Now 100% adjusted."  
6.     }  
7. }
```

Using Protocol



1. `var a = SimpleClass()`
2. `a.adjust()`
3. `let aDescription = a.simpleDescription`

Adopting Protocol



```
1. struct SimpleStructure: ExampleProtocol {  
2.     var simpleDescription: String = "A simple  
   structure"  
3.     mutating func adjust() {  
4.         simpleDescription += " (adjusted)"  
5.     }  
6. }
```

Using Protocol



1. `var b = SimpleStructure()`
2. `b.adjust()`
3. `let bDescription = b.simpleDescription`

Class Only Protocols



```
1. protocol SomeClassOnlyProtocol: class {  
2.     // class-only protocol definition goes here  
3. }
```

Extensions



```
1. extension Int: ExampleProtocol {  
2.     var simpleDescription: String {  
3.         return "The number \$(self)"  
4.     }  
5.     mutating func adjust() {  
6.         self += 42  
7.     }  
8. }  
9. 7.simpleDescription
```

Extensions



```
1. extension Double {  
2.     var km: Double { return self * 1_000.0 }  
3.     var m: Double { return self }  
4.     var cm: Double { return self / 100.0 }  
5.     var mm: Double { return self / 1_000.0 }  
6.     var ft: Double { return self / 3.28084 }  
7. }  
8. let oneInch = 25.4.mm  
9. println("One inch is \"(oneInch) meters\"")  
10. // prints "One inch is 0.0254 meters"  
11. let threeFeet = 3.ft  
12. println("Three feet is \"(threeFeet) meters\"")  
13. // prints "Three feet is 0.914399970739201 meters"
```

In-Out Parameters



```
1. func swapTwoInts(inout a: Int, inout b: Int) {  
2.     let temporaryA = a  
3.     a = b  
4.     b = temporaryA  
5. }
```


In-Out Parameters



1. `var someInt = 3`
2. `var anotherInt = 107`
3. `swapTwoInts(&someInt, &anotherInt)`
4. `println("someInt is now \$(someInt), and anotherInt is now \$(anotherInt)")`
5. `// prints "someInt is now 107, and anotherInt is now 3"`

Generics



```
1. func swapTwoStrings(inout a: String, inout b:  
   String) {  
2.     let temporaryA = a  
3.     a = b  
4.     b = temporaryA  
5. }
```

Generics



```
1. func swapTwoDoubles(inout a: Double, inout b:  
   Double) {  
2.     let temporaryA = a  
3.     a = b  
4.     b = temporaryA  
5. }
```

Generics



- `func swapTwoValues<T>(inout a: T, inout b: T) {`
- `let temporaryA = a`
- `a = b`
- `b = temporaryA`
- `}`

Generics



```
1. func repeat<ItemType>(item: ItemType, times: Int) ->  
   [ItemType] {  
2.     var result = [ItemType]()  
3.     for i in 0..4.         result.append(item)  
5.     }  
6.     return result  
7. }  
8. repeat("knock", 4)
```