

Chapter 4: Enumerations and Pattern Matching

```
enum Dimension {  
    case us(Double, Double)  
    case metric(Double, Double)  
}  
  
func convert(dimension: Dimension) -> Dimension {  
    switch dimension {  
        case let .us(length, width):  
            return .metric(length * 0.304, width * 0.304)  
        }  
    }  
}  
  
let convertedDimension = convert(dimension: Dimension.metric(5.0, 4.0))  
print(convertedDimension)
```

Switch must be exhaustive, consider adding a default clause

```
let anyValue: Any = 7  
  
switch anyValue {  
    case is Int: print(anyValue + 3)  
    case let ourValue as Int: print(ourValue + 3)  
    default: ()  
}
```

Binary operator '+' cannot be applied to operands of type 'Any' and 'Int'

Chapter 5: Generics and Associated Type Protocols

```
var name = "John Doe"
var phoneNumber = 5141111111

let (a, b) = swapTwoValues(a: name, b: phoneNumber)
```

❗ Cannot invoke 'swapTwoValues' with an argument list of type '(a: @lvalue String, b: @lvalue Int)'

```
func format(a: String) -> String {
    return "formatted \(a)"
}

func appendStrings(a: String, b: String) -> String {
    return a + b
}

print("The result is: \(calculate(a: "2", b: "2", funcA: appendStrings, funcB: format))")
```

❗ Cannot convert value of type '(String, String) -> String' to expected argument type '(...) -> ...'

Chapter 7: Dealing with Optionals

```
var aString: String = "A String literal"
aString = nil // Compile error
```

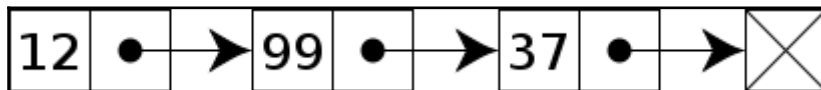
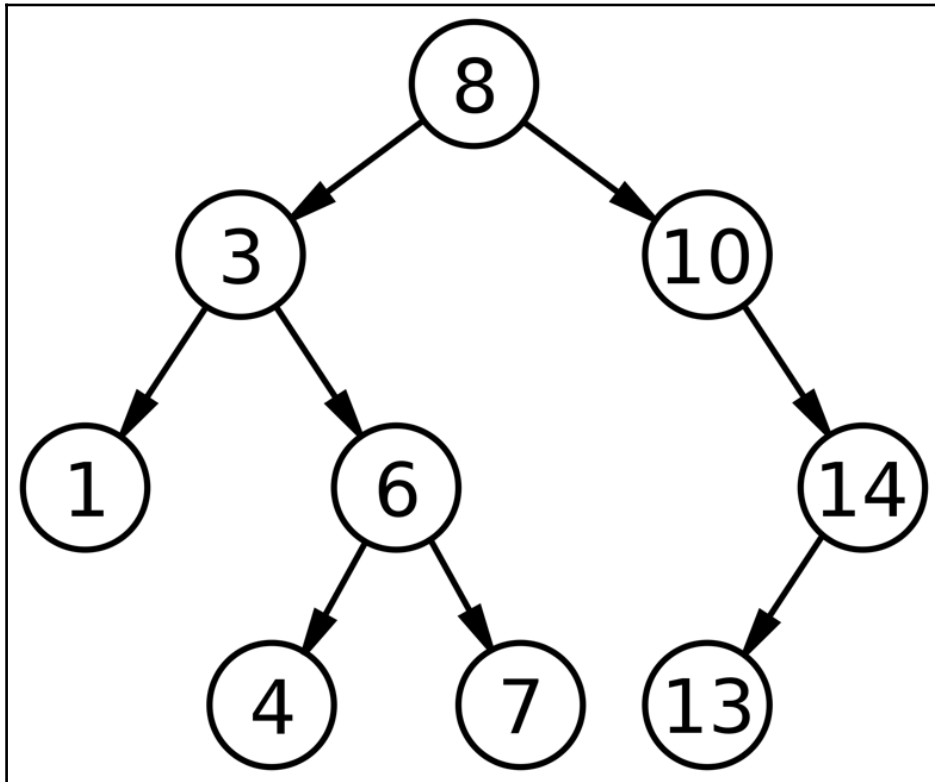
! Nil cannot be assigned to type 'String'

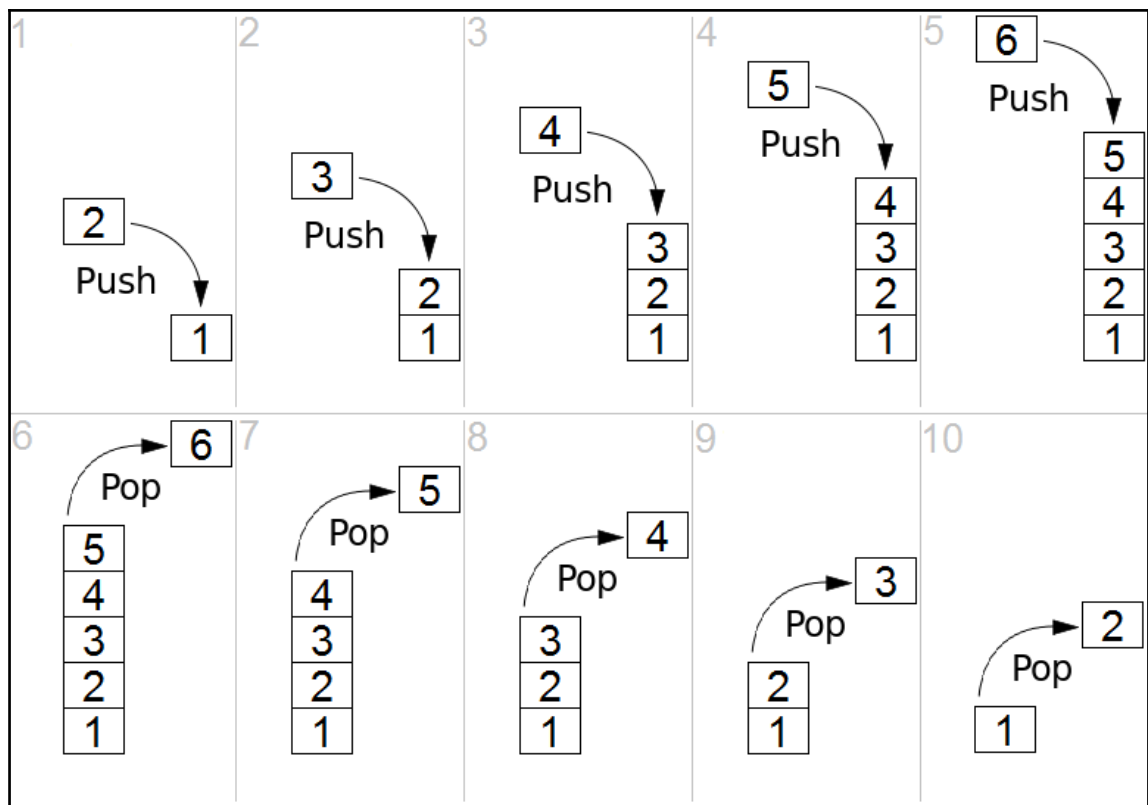
```
let optionalDict: Dictionary<String, Int>? = ["One": 1, "Two": 2, "Three": 3]
let implicitlyUnwrappedDict: Dictionary<String, Int>! = ["One": 1, "Two": 2, "Three": 3]

let firstValue = optionalDict["One"]
let implicitlyUnwrappedFirstValue = implicitlyUnwrappedDict["One"]
```

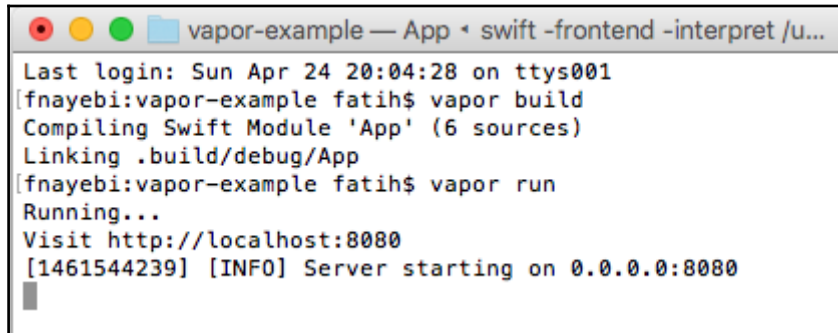
Value of optional type 'Dictionary<String, Int>?' not unwrapped; did you mean to use '!' or '!!'?

Chapter 8: Functional Data Structures






Chapter 11: Case Study - Developing an iOS Application with FP and OOP Paradigms



```
vapor-example — App • swift -frontend -interpret /u...
Last login: Sun Apr 24 20:04:28 on ttys001
[fnayebi:vapor-example fatih$ vapor build
Compiling Swift Module 'App' (6 sources)
Linking .build/debug/App
[fnayebi:vapor-example fatih$ vapor run
Running...
Visit http://localhost:8080
[1461544239] [INFO] Server starting on 0.0.0.0:8080
```



```
vapor-example — -bash — 80x24
Last login: Mon Apr 25 22:12:54 on ttys001
fnayebi:vapor-example fatih$ curl -X "POST" "http://localhost:8080/postTodo/" \
> -H "Cookie: test=123" \
> -H "id: 3" \
> -H "notes: do not forget to buy potato chips" \
> -H "Content-Type: application/json" \
> -H "description: Our first todo item" \
> -H "completed: false" \
> -H "name: todo 1" \
> -d "{}"
[{"description":"Our first todo item","name":"todo 1","id":3,"completed":false,"
notes":"do not forget to buy potato chips"}]fnayebi:vapor-example fatih$
```

