



A Swift Introduction To Swift

by

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Swift is a
type safe
language

Types

Javascript

```
"1" + 2 = "12"
```

Ruby


```
x = 5
```

```
x = "a string"
```

```
x = Dog.new
```

Types Swift

"1" + 2

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

Types Swift

```
var x = 5  
x = "a string"
```



Cannot assign value of type 'String' to type 'Int'

Types

```
let number: Int = 2
```

```
let name: String = "Sup Codebar"
```

```
let primes: [Int] = [2, 3, 5, 7, 11]
```

```
let view: UIView = UIView()
```

```
view.backgroundColor = UIColor.whiteColor()
```

✨ Type inference ✨

```
let number          = 2
let name            = "Sup Codebar"
let primes          = [2, 3, 5, 7, 11]

let view            = UIView()
view.backgroundColor = .whiteColor()
```

Constants & variables

```
let words = "Hello, there"  
words = "Bye for now"
```


Constants & variables

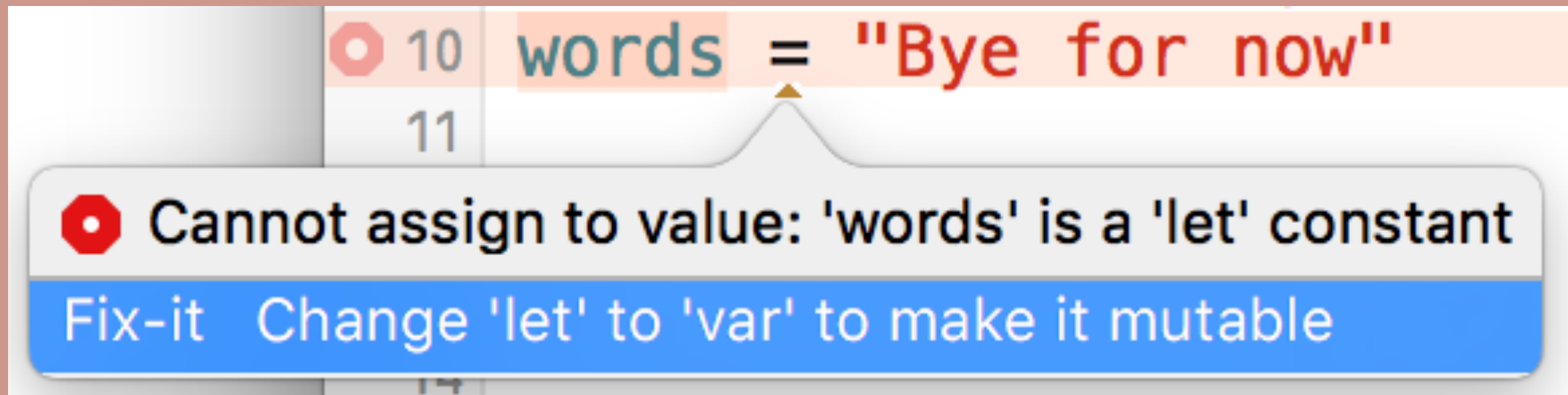
```
let words = "Hello, there"  
words = "Bye for now"
```



Cannot assign to value: 'words' is a 'let' constant

Constants & variables

```
let words = "Hello, there"  
words = "Bye for now"
```



Constants & variables

```
var words = "Hello, there"  
words = "Bye for now"
```

Functions

```
func multiply(array: [Int], by: Int) -> [Int]
```

Functions

```
func multiply(array: [Int], by: Int) -> [Int] {  
    var result = [Int]()  
    for x in array {  
        result.append(x * by)  
    }  
    return result  
}
```

Functions

```
func multiply(array: [Int], by: Int) -> [Int] {  
    return array.map({ (x) -> Int in  
        return x * by  
    })  
}
```

Functions

```
func multiply(array: [Int], by: Int) -> [Int] {  
    return array.map { $0 * by }  
}
```

Functions

```
func multiply(array: [Int], by: Int) -> [Int] {  
    return array.map { $0 * by }  
}
```

```
multiply(array: numbers, by: 2)
```


Classes

```
class Counter {  
    private var count = 0  
  
    func increment() {  
        count += 1  
    }  
}
```

```
let counter = Counter()  
counter.increment()
```

Optionals?!

Optionals

```
class Codebar {  
    var location: String = "Pivotal Labs, EC1V 9NR"  
}
```

```
let codebar = Codebar()
```

```
// insert lots of awesome talks here
```

```
codebar.location = "The pub"
```

```
// insert lots of inspiring conversations here
```

```
codebar.location = nil ✨
```

?

Optionals

```
class Codebar {  
    var location: String? = "Pivotal Labs, EC1V 9NR"  
}
```

```
let codebar = Codebar()  
// stuff
```

```
codebar.location = nil 🎉
```

Other super awesome stuff

- structs
- enums
- protocols
- generics
- 🍏 frameworks

Further reading

- "The Swift Programming Language" by Apple
- raywenderlich.com
- swift.org
- WWDC videos
- IBM Swift Sandbox
- Swift Playgrounds for iPad on iOS 10

Thanks



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