



Swift 3.0 Cheat Sheet and Quick Reference

Class Implementation

```
class MyClass : OptionalSuperClass,
OptionalProtocol1, OptionalProtocol2 {

    var myProperty:String
    var myOptionalProperty:String?
    // More properties...

    // Only need override if subclassing
    override init() {
        myProperty = "Foo"
    }

    // More methods...
}
```

Methods

```
func doIt() -> Int {
    return 0
}
func doIt(a:Int) -> Int {
    return a
}
func doIt(a:Int, b:Int) -> Int {
    return a+b
}
```

Creating/Using an Instance

```
var a = MyClass()
a.myProperty
a.doIt()
a.doIt(a:1)
a.doIt(a:2, b:3)
```

Enums

```
enum CollisionType: Int {
    case player = 1
    case enemy = 2
}
var type = CollisionType.player
```

Declaring Variables

```
var mutableDouble:Double = 1.0
mutableDouble = 2.0

let constantDouble:Double = 1.0
// constantDouble = 2.0 // error

var mutableInferredDouble = 1.0

var optionalDouble:Double? = nil
optionalDouble = 1.0
if let definiteDouble = optionalDouble {
    definiteDouble
}
```

Variable types	
Int	1, 2, 500, 10000
Float	1.5, 3.14, 578.234
Double	
Bool	true, false
String	"Kermit", "Gonzo", "Ms. Piggy"
ClassName	UIView, UIButton, etc

Control Flow

```
var condition = true
if condition {
} else {
}

var val = 5
switch val {
case 1:
    "foo"
case 2:
    "bar"
default:
    "baz"
}

// omits upper value, use ... to include
for i in 0..<3 {
}
```

String Quick Examples

```
var personOne = "Ray"
var personTwo = "Brian"
var combinedString = "\(personOne):
Hello, \(personTwo)!"
var tipString = "2499"
var tipInt = Int(tipString)

tipString = "24.99"
var tipDouble = Double(tipString)
```

Array Quick Examples

```
var person1 = "Ray"
var person2 = "Brian"
var array:[String] = [person1, person2]
array.append("Waldo")
for person in array {
    print("person: \(person)")
}
var waldo = array[2]
```

Dictionary Quick Examples

```
var dict:[String: String] = ["Frog":
    "Kermit", "Pig": "Ms. Piggy",
    "Weirdo": "Gonzo" ]
dict["Weirdo"] = "Felipe"
dict["Frog"] = nil // delete frog
for (type, muppet) in dict {
    print("type: \(type), muppet:
    \(muppet)")
}
```