Variables in Swift

The name of variables in Swift can be composed of letters, digits, and the underscore character. It must begin with either a letter or an underscore. Upper and lowercase letters are distinct because Swift 4 is a case-sensitive programming language. You can use simple or Unicode characters to name your variables. Swift supports following data types:

* Int
* Float
* Double
* Boolean (Bool)
* String
* Character
* Array
* Dictionaries
* Structures
* Classes
* Optional

As most of the programming languages, the variable should be declared to tell the compiler where and how much to create the storage for the variable. To declare the variables, you must declare them using *var*. For example:

var first\_name = “Myname”

If you don’t want to assign a value right away, you can declare the variable with just the variable type. For example:

var amount:Float

…

amount = 10.45

In Swift, you cannot add a string and integer like “5” + 65, but you can include your int variable in a string. For example:

var a = 22

var x = “I am **\(a)** years old”

If you print x, the output would be: I am 22 years old.

You can also change the variable from one type to another. For example:

1. Change from String to Int

* var age = “22”

var ageint = Int(age)

1. Change from Int to String

* var age = 22

var agestring = String(age)

Swift is statically typed and strongly typed. Whenever you use a variable or pass something as a function argument, Swift checks to see if it is a correct type. It checks this at compile time.

**Reference**

* <https://www.tutorialspoint.com/swift/swift_variables.htm>
* <https://www.hackingwithswift.com/example-code/strings/how-to-use-string-interpolation-to-combine-strings-integers-and-doubles#:~:text=Swift%20is%20also%20smart%20enough,floating%2Dpoint%20numbers%20just%20fine>.
* <https://www.aidanf.net/learn-swift/types_and_type_inference#:~:text=Swift%20is%20strongly%20typed.,(since%20it's%20statically%20typed)>.
* <https://docs.swift.org/swift-book/LanguageGuide>