Swift - Constants

Constants refer to fixed values that a program may not alter during its execution. Constants can be of any of the basic data types like an *integer constant, a floating constant, a character constant, or a string literal*. There are *enumeration constants* as well.

**Constants** are treated just like regular variables except the fact that their values cannot be modified after their definition.

## **Constants Declaration**

Before you use constants, you must declare them using **let** keyword as follows −

let constantName = <initial value>

Following is a simple example to show how to declare a constant in Swift 4 −

let constA = 42

print(constA)

When we run the above program using playground, we get the following result −

42

## **Type Annotations**

You can provide a **type annotation** when you declare a constant, to be clear about the kind of values the constant can store. Following is the syntax −

var constantName:<data type> = <optional initial value>

The following example shows how to declare a constant in Swift 4 using Annotation. Here it is important to note that it is mandatory to provide an initial value while creating a constant −

let constA = 42

print(constA)

let constB:Float = 3.14159

print(constB)

When we run the above program using playground, we get the following result.

42

3.1415901184082

## **Naming Constants**

The name of a constant 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. Following are valid examples −

let \_const = "Hello, Swift 4!"

print(\_const)

let 你好 = "你好世界"

print(你好)

When we run the above program using playground, we get the following result −

Hello, Swift 4!

你好世界

## **Printing Constants**

You can print the current value of a constant or variable using **print** function. You can interpolate a variable value by wrapping the name in parentheses and escape it with a backslash before the opening parenthesis: Following are valid examples −

let constA = "Godzilla"

let constB = 1000.00

print("Value of \(constA) is more than \(constB) millions")