

Kotlin Function – Default Arguments

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Default Arguments : Kotlin supports default argument values assigned to parameters in function definition. The function is allowed to call with no argument passed for a parameter when a default value is specified in the definition.

In a function definition, mix of parameters with and without default values is allowed. Usually, when there is such a mix, the parameters with default values are mentioned at the last of parameters list in the definition, so that when an argument is not passed, default value would be picked up.

Syntax to define default arguments

The syntax to define default arguments in Kotlin is

```
fun funName(param1 : Type, param2: Type = DefaultValue){ }
```

- Arguments for parameters having default values are optional.
- Arguments for parameters with no default values are mandatory as usual.

Example 1 – Kotlin Default Arguments

In the following example, we shall define a function which calculates the sum of two numbers passed as arguments to it. When no arguments are passed, it considers the default argument values provided in the function definition.

Kotlin Program – example.kt

```
fun main(args: Array<String>) {  
  
    // function call with arguments  
    val sum1 = add(5, 6) // output : 11  
    println(sum1)  
  
    // function call with no arguments  
    val sum2 = add() // output : 2  
    println(sum2)  
  
}
```

```
/**
 * add function with parameters a, b
 * a : default argument is 1
 * b : default argument is 1
 */
fun add(a:Int = 1, b:Int = 1): Int {
    return a + b
}
```

Output

```
11
2
```

The add function may not mean much, but it delivers the idea of usage of default arguments.

Example 2 – Kotlin With Mix of Default Arguments and non-default

In the following example, we shall define a function which calculates the sum of two or three integers passed as arguments to it.

Kotlin Program – example.kt

```
fun main(args: Array<String>) {

    val sum1 = add(5, 6)
    val sum2 = add(5, 6, 7)
    val sum3 = add(5, 6, 7, 8)
    println(sum1)
    println(sum2)
    println(sum3)

}

/**
 * add function with two, three or four integer arguments
 * c : default argument is 0
 * d : default argument is 0
 */
fun add(a:Int, b:Int, c:Int = 0, d:Int = 0): Int {
    return a + b + c + d
}
```

Output

```
11
18
26
```

Observe that the parameters with default arguments are declared last in the definition.

Conclusion

In this [Kotlin Tutorial – Kotlin Default Arguments](#), we have learnt how to provide default argument values to parameters in function's definition.

Kotlin Java

- ◆ [Kotlin Tutorial](#)

Getting Started

- ◆ [Setup Kotlin\(Java\) Project](#)
- ◆ [Kotlin Example Program](#)
- ◆ [Convert Java to Kotlin](#)
- ◆ [Kotlin Main Function](#)
- ◆ [Kotlin Loops](#)
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Object Oriented Concepts

Classes

- ◆ [Kotlin - Class, Primary and Secondary Constructors](#)
- ◆ [Kotlin Sealed Class](#)
- ◆ [Kotlin Data Class](#)
- ◆ [Kotlin Enum](#)
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Inheritance

- ◆ [Kotlin Inheritance](#)
- ◆ [Kotlin Override Method of Super Class](#)

Abstraction

- ◆ Kotlin Abstraction

- ◆ Kotlin Abstract Class

- ◆ Kotlin - Interfaces

- ◆ Kotlin Null Safety

Exception Handling

- ◆ Kotlin Try Catch

- ◆ Kotlin Throw Exception

- ◆ Kotlin Custom Exception

Fix Compilation Errors

- ◆ Kotlin - Variable must be initialized

- ◆ Kotlin - Primary Constructor call expected

- ◆ Kotlin - Null can not be a value of a non-null type String

- ◆ Kotlin - Cannot create an instance of an abstract class

Kotlin - String Operations

- ◆ Kotlin - Compare Strings

- ◆ Kotlin - Replace String

- ◆ Kotlin - Split String

- ◆ Kotlin - Split String to Lines

- ◆ Kotlin - String Capitalize

Kotlin - Functions

- ⇒ Kotlin Function - Default Arguments

- ◆ Kotlin - Use Function

Kotlin Collections

Kotlin List

- ◆ Kotlin List

- ◆ Kotlin List forEach

Kotlin File Operations

- ◆ Kotlin - Create File

◆ [Kotlin - Read File](#)

◆ [Kotlin - Read File as List of Lines](#)

◆ [Kotlin - Write to File](#)

◆ [Kotlin - Append Text to File](#)

◆ [Kotlin - Check if File Exists](#)

◆ [Kotlin - Copy a File to Other](#)

◆ [Kotlin - Iterate through all files in a directory](#)

◆ [Kotlin - Delete Recursively](#)

◆ [Kotlin - Get File Extension](#)

Kotlin Interview Q/A

◆ [Kotlin Interview Questions](#)

Kotlin Android

◆ [Kotlin Android Tutorial](#)

Useful Resources

◆ [How to Learn Programming](#)