Parameters

This lesson discusses parameters passed into methods as well as the use of default parameters in C#

WE'LL COVER THE FOLLOWING

- Introduction
- Default Parameters

Introduction

A *method* can *declare* any number of *parameters* (in this example, `i`, `s` and `o` are the *parameters*).

```
static void DoSomething(int i, string s, object o) {
 Console.WriteLine(String.Format("i={0}, s={1}, o={2}", i, s, o));
}
```

Parameters can be used to pass values into a *method* so that the *method* can work with them. This can be every kind of work like

- printing the values
- making modifications to the object referenced by a *parameter*
- storing the values

When you call the *method*, you need to pass an actual **value** for every *parameter*. At this point, the values that you actually pass to the method call are called **Arguments**.

```
DoSomething(x, "hello", new object());
```

Default Parameters

You can use *default parameters* if you want to provide the option to leave out *parameters*.

When you call such a *method* and omit a *parameter* for which a *default value* is provided, the compiler inserts that *default value* for you.

> **Note:** Keep in mind that *parameters* with default values need to be written after *parameters* without *default values*.

Down below is an example on how to pass the *default parameters* correctly.

```
using System;

class DefaultValue1
{
    static void SaySomething(string say, string what = "ehh") {
        //Correct

        Console.WriteLine(say + what);
    }
    static void Main()
    {
        SaySomething("mehh");
    }
}
```

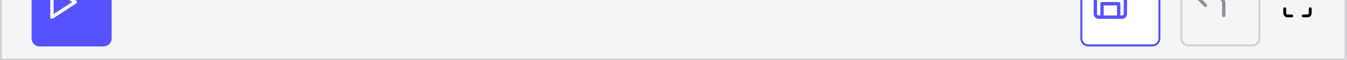
Passing Default Value Correctly

Now let’s look at what happens if you pass the *default parameter* first.

```
using System;

class DefaultValue2
{
    static void SaySomething(string what = "ehh",string say) {
        //InCorrect

        Console.WriteLine(say + what);
    }
    static void Main()
    {
      //will give an error
        SaySomething("mehh");
    }
}
```



Passing Default Value Incorrectly

When you'll run the code above you'll get an error, **"Optional parameter cannot precede required parameters"**.

In the next lesson, we will take a look at the two ways to pass *parameters* to *methods*.