

Java Methods

A method is a block of code which only runs when it is called.

You can pass data, known as parameters, into a method.

Methods are used to perform certain actions, and they are also known as functions.

Why use methods? To reuse code: define the code once, and use it many times.

Create a Method

A method must be declared within a class. It is defined with the name of the method, followed by parentheses (). Java provides some pre-defined methods, such as `System.out.println()`, but you can also create your own methods to perform certain actions:

Example

Create a method inside Main:

```
public class Main {  
    static void myMethod() {  
        // code to be executed  
    }  
}
```

Example Explained

`myMethod()` is the name of the method

`static` means that the method belongs to the `Main` class and not an object of the `Main` class. You will learn more about objects and how to access methods through objects later in this tutorial.

`void` means that this method does not have a return value. You will learn more about return values later in this chapter.

Call a Method

To call a method in Java, write the method's name followed by two parentheses () and a semicolon;

In the following example, myMethod() is used to print a text (the action), when it is called:

Example

Inside main, call the myMethod() method:

```
public class Main {  
    static void myMethod() {  
        System.out.println("I just got executed!");  
    }  
  
    public static void main(String[] args) {  
        myMethod();  
    }  
}  
  
// Outputs "I just got executed!"
```

A method can also be called multiple times:

Example

```
public class Main {  
    static void myMethod() {  
        System.out.println("I just got executed!");  
    }  
  
    public static void main(String[] args) {  
        myMethod();  
    }  
}
```

```
    myMethod();  
    myMethod();  
}  
  
// I just got executed!  
// I just got executed!  
// I just got executed!
```

References

- https://www.tutorialspoint.com/java/java_methods.htm
- <https://www.programiz.com/java-programming/methods>
- https://www.w3schools.com/java/java_methods.asp