



How To Java Tutorials

Lesson 8

Java Methods

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Java Functions

Function or a method is a task with a name.

A set of code make a certain task on some parameters

With a signature of a name, return type, parameters and Type

Function declaration in Java

The syntax to declare a function in Java is similar to Others Programming languages, in general in Java it has 6 parts

1-Modifiers:

Such as public, private. to be discussed later

2-The return type:

The data type of the value returned by the method, or void If the method does not return a value.

3-The method name:

The rules for field names apply to method names as well, But the convention is a little different.

4-The parameter list:

In parenthesis a comma-delimited list of input parameters, Preceded by their data types, enclosed by parentheses, (). If There are no parameters, you must use empty parentheses.

5-An exception list: to be discussed later.

6-The method body

Enclosed between braces—the method's code, including the Declaration of local variables, goes here.

CODEING

Creating define Function Demo

Calling Methods

To use your predefined methods you must invoke them or in Other meaning call them

Methods can be called in Java with its name and the set of Its parameters exactly as you declarer it.

How you call Methods in Java

Java is packages based so methods can be called in 4 Ways Based on the type of method

1-In it's own Class:

All the class parts can call the methods that defined on it

2-In The Subclass

When you define methods “with the privilege to do that” in A class any subclass that inherit from this class, Can call It's methods and use it .

3-The Same Package:

As we talked before Java application is package based and We defined package as a set of classes and interfaces You can define methods that can be called in any class in The same package to call it and use it .

4-The others Packages “World ”:

In some Cases you want to make your functions that is Public to all all others packages can call it and use it in Java you can provide methods that can be called from others Packages or even apps.

CODEING

Creating Code Examples

Overloading Methods

The Java programming language supports overloading Methods, and Java can distinguish between methods with Different method signatures. This means that methods within A class can have the same name if they have different Parameter lists.

Overloaded methods are differentiated by the number and The type of the arguments passed into the method. You cannot declare more than one method with the same Name and the same number and type of arguments, because The compiler cannot tell them apart.

To make overloading methods you can change the signature of the method by changing

- 1-The types of parameters or
- 2-The number of parameters

CODEING

Creating Code Examples

Lesson Assignment

As We start to make our hand dirty in code every lesson
We will end with as task you are free to make it or not
But I recommend you to make it done to achieve the lesson
Goal and practice your self for the lesson contents

Assignment

Make a simple Java application

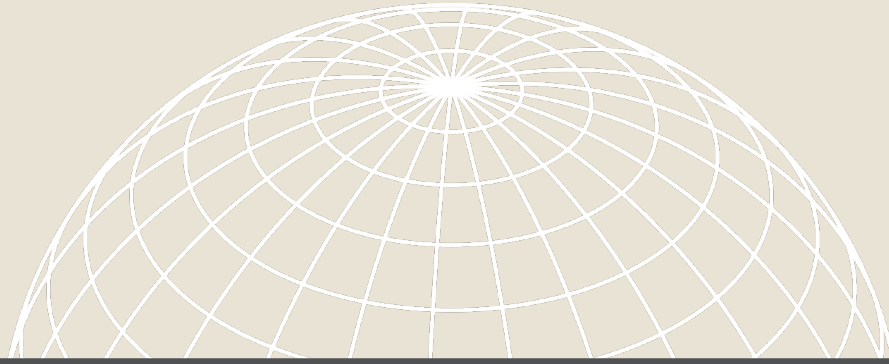
That create:

1-Methods that make all the arithmetic
Operations “+ - * / and % “

That take 2 parameters and return the
value

2-Add method to print the result on
The console

That take a parameter and print it on
The screen



Thank You For Watching

I am still not Better, But I always try .

See You Next

