

function parameter

function - definition recap

“.. is a sequence of program instructions that perform a specific task, packaged as a unit.”

<https://en.wikipedia.org/wiki/Subroutine>

function

Example:

jump five times

function

Now, let's imagine we want to be able to jump 3 times.

A new function:

jump three times

function

How about jumping 2 times? 123 times?

Imagine if we could call the jump function and supply a note on how many times to actually jump:

jump ... and by the way, do it 123 times

function parameters

We can, by using parameters

function parameters

jump (5)

function parameters

jump (123)

jump (3987)

jump (3)

jump (12)

Only one function :)

function parameters

```
jump(int nrOfJumps) {  
    for (int i=0; i<nrOfjumps; i++) {  
        jumpOnce()  
    }  
}
```

function parameters

Example execution

```
jump (123)    jump(int nrOfJumps) {  
               for (int i=0; i<nrOfjumps; i++) {  
                 jumpOnce()  
               }  
            }
```

function parameters

Example execution

```
jump (123)    jump(int nrOfJumps) {                               nrOfJumps
               for (int i=0; i<nrOfjumps; i++) {
                 jumpOnce()
               }
            }
```

function parameters

Example execution

```
jump (123)    jump(int nrOfJumps) {                               nrOfJumps=123
               for (int i=0; i<nrOfjumps; i++) {
                   jumpOnce()
               }
            }
```

function parameters

Example execution

```
jump (123)    jump(int nrOfJumps) {                               nrOfJumps=123
               for (int i=0; i<nrOfjumps; i++) {
                   jumpOnce()
               }
            }
```

function parameters

Example execution

```
jump (123)    jump(int nrOfJumps) {                nrOfJumps=123
               ... .
            }
```

function parameters

Example execution

```
jump (123)    jump(int nrOfJumps) {                               nrOfJumps=123
               for (int i=0; i<nrOfjumps; i++) {
                 jumpOnce()
               }
            }
```

function parameters

Example execution

```
jump (123)    jump(int nrOfJumps) {  
bladi()      for (int i=0; i<nrOfjumps; i++) {  
              jumpOnce()  
            }  
            }
```


function parameter syntax

```
functionName(parameters)
```

where parameters can be 0..n many parameter,
which looks like:

```
type varName
```

function parameter syntax

Example

```
add(int a, int b)
```

function parameters

“used in a subroutine to refer to one of the pieces of data provided as input to the subroutine”

[https://en.wikipedia.org/wiki/Parameter_\(computer_programming\)](https://en.wikipedia.org/wiki/Parameter_(computer_programming))

function parameters

Names are local

function parameters

Example execution

```
int nrOfJumps = 789;  
jump (nrOfJumps);
```

function parameters

Example execution

```
jump(int nrOfJumps) {  
    for (int i=0; i<nrOfjumps; i++) {  
        jumpOnce()  
    }  
}
```

nrOfJumps=789