



# Website development

Lecture 2

# Function

**Function** is a block of code that implements certain action.

**Function** is executed only when it is called.

# Function

**Function** in JavaScript is declared using **function** keyword, name of the function and brackets `()`.

**Brackets** may accept multiple parameters separated by coma.

Action implemented by the function is written inside curly braces `{ }`

```
function functionName(parameter1, parameter2, parameter3) {  
    // function body  
}
```

# Function call

To call the function we need to write the name followed by brackets.

```
function hello() {  
    console.log('Hello world');  
}
```

We pass the parameters inside the brackets when needed

```
function sum(a, b) {  
    console.log(a+b);  
}
```

```
hello(); // Hello world
```

```
sum(5, 10); // 15
```

# Function hoisting

We may create function below but call it above:

```
hello();
```

```
function hello() {  
    console.log('Hello world');  
}
```

JavaScript automatically moves the function definition to the top. This process is called **hoisting**.

# Function parameter

In the following example, **a** and **b** are the parameters of the function:

```
function sum(a, b) {  
    console.log(a+b);  
}
```

```
sum(5, 6)
```

5 and 6 are arguments. Thus, values passed to a function are called arguments.

# Function parameter

It is enough to specify the name of the parameters of the function when declaring them. Depending on the given value, JavaScript will find out the type of the parameter (string, boolean, number);

```
function sum(a, b) {  
    console.log(a+b);  
}
```

```
sum(5, 6) //11
```

```
sum('Eshmat', 'Toshmatov') // EshmatToshmatov
```

# Function return

Often a function returns a specific value.

For example, the following function should calculate the sum of two numbers and return this value. We do this with the **return** keyword.

**return** terminates the function, i.e. no further lines are read from it:

```
function sum(a, b) {  
    return a + b;  
}  
  
let x = sum(4, 3); // variable x will obtain the result returned from  
function sum.
```



Thank you for your attention