

# Training Day 21 Report

21 July 2025

## Functions in JavaScript

### 1. Introduction to Functions

A **function** in JavaScript is a block of code designed to perform a specific task. It allows you to group statements together and reuse them throughout your program. Functions make the code **modular, maintainable, and reusable**.

In simple terms:

A function is like a machine — you give it some input (parameters), it does something, and gives an output (return value).

### 2. Syntax of a Function

A function is defined using the function keyword.

#### Syntax:

```
function functionName(parameters) {  
    // block of code to be executed  
}
```

#### Example:

```
function greet() {  
    console.log("Hello, welcome to JavaScript!");  
}  
  
greet(); // Function call
```

#### Explanation:

- `function` → keyword to declare a function
- `greet` → function name
- `()` → parentheses for parameters
- `{ }` → contains the function body
- `greet()` → function call (executes the function code)

### 3. Function Parameters and Arguments

Functions can take **parameters**, which act as placeholders for values.

#### Example:

```
function add(a, b) {  
    console.log(a + b);  
}  
  
add(5, 10);
```

- Here, a and b are **parameters**.
- When calling the function, 5 and 10 are **arguments**.

#### Output:

15

You can pass multiple arguments or even none at all.

### 4. Return Statement

A function can return a value using the return keyword.

#### Example:

```
function multiply(x, y) {  
    return x * y;  
}  
  
let result = multiply(4, 5);  
  
console.log(result);
```

#### Output:

20

When the return statement is executed, the function stops and returns the specified value.