**Introduction to JavaScript Functions**

**Introduction**

**JavaScript** is *a*lightweight,cross-platform*,*single-threaded, andinterpreted compiled programming language. It is also known as the scripting language for webpages. It is well-known for the development of web pages, and many non-browser environments also use it.

JavaScript is a weakly typed languageit can be used for client-side developments as well as server-side developments. JavaScript is both an imperative and declarative type of language. JavaScript contains a standard library of objects like array, date and math and a core set of language elements like operators, **control structure** and statements.

A function is a sequence of commands that can be reused together later in a program. Functions name the sequence of commands and dictate what code is executed. Functions also allows for separation of code so we can easily use it again throughout a program.

A JavaScript function is a set of code that is written once but is executed any number of times. The functions eliminate code complexity by enabling re-usability. A function is a block of reusable code that is used several times in the JavaScript program where it is defined.

**Basics of JavaScript Functions**

**What is a Function**

Definition - A function in JavaScript is similar to a procedure a set of statements that performs a task and calculates a value but for a procedure to qualify as a function, it should take some input and return an output where there is some obvious relationship between the input and the output.

Purpose - A JavaScript function is a set of code that is written once but is executed any number of times. The functions eliminate code complexity by enabling re-usability. A function is a block of reusable code that is used several times in the JavaScript program where it is defined.

**Syntax of a Function**

Basic structure - A function definition consists of the function keyword

* The name of the function.
* A list of parameters to the function, enclosed in parentheses and separated by commas.
* The JavaScript statements that define the function, enclosed in curly braces

**Types of Functions**

1. Named Functions

2. Anonymous Functions

3. Arrow Functions

**Function Parameters and Arguments**

* Function with Parameters
* Default Parameters