

**Question 1: What are functions in JavaScript? Explain the syntax for declaring and calling a function.**

**Answer:**

A function is a block of code that performs a specific task.

You write the code once, and you can use (call) it again and again.

**Why functions are useful?**

- Reduce code repetition
- Make programs easier to read
- Improve organization

**Syntax for Declaring a Function**

```
function functionName() {  
    // code  
}
```

**Syntax for Calling (Using) a Function**

```
functionName();
```

**Example :**

```
function sayHello() {  
    console.log("Hello Everyone!");  
}
```

```
sayHello(); // calling the function
```

**Question 2: What is the difference between a function declaration and a function expression?**

There are **two common ways** to create functions:

**1) Function Declaration**

- Starts with the function keyword

- Can be called **before** it is written (hoisting)

**Example:**

```
function greet() {
    console.log("Good Morning");
}
```

## 2) Function Expression

- Function stored in a variable
- Cannot be called before defining

**Example:**

```
let greet = function() {
    console.log("Good Morning");
};
```

## Question 3: Discuss the concept of parameters and return values in functions.

**Parameters:**

- Values **received** by the function
- Like input to a machine

**Example:**

```
function multiply(a, b) {
    console.log(a * b);
}
```

**Return Value:**

- Function gives **back** a result using return.

**Example:**

```
function add(x, y) {
    return x + y;
```

```
}
```

```
let result = add(5, 3);
console.log(result); // 8
```