Day 06 Notes

✎ Key Takeaway	Functions
🗓 Learning Date	@June 28, 2025
📦 Module	**Module 1: JavaScript Fundamentals**
✳ Status	Done
✓ Topic	✅ **Day 6:** Functions & Arrow Functions
🔗 Video Link	https://www.youtube.com/watch?v=6UJ9SyHvkJY&list=PLIJrr73KDmRw2Fwwjt6cPC_tk5vcSICCu&index=6

Function :

Parameters: The input that we passed to a function while declaring it.

Arguments: The actual values that replace the declared parameters when invoking or calling a function.

The **rest parameter** in JavaScript, introduced in ES6 (ECMAScript 2015), allows a function to accept an indefinite number of arguments as an array. It is indicated by three dots (…) followed by a parameter name and must be the last parameter in a function definition.

InnerFunction :

Call back func :

A callback function in JavaScript is a function passed as an argument to another function, which is then invoked inside the outer function to complete some kind of routine or action.

Side-Effect :

> "When a piece of code affects something outside the function's scope, it causes a side effect."

📌 What is a Higher-Order Function?

A **higher-order function** is a function that **does at least one of these:**

1️⃣ Takes one or more functions as arguments (**callback functions**)

2️⃣ Returns a function as its result

In short: **Functions that work with other functions!**

IIFE :

An IIFE, or Immediately Invoked Function Expression, is a JavaScript design pattern where a function is executed as soon as it is defined. It creates a private scope for variables and functions declared within it, preventing them from polluting the global scope.

```
(function() {
// Code within the IIFE
})();
```

IIFE

- Call Stack
- Recursion