🔥 **JavaScript Day 7 Notes – Stack vs Heap Memory**

🎯 **1. Memory Management in JavaScript**

JavaScript uses **two types of memory** to store data:

1. **Stack Memory (Primitive Types)** 📌
    - Used for **primitive data types** (string, number, boolean, null, undefined, symbol, bigint)
    - Stores **a copy of the value**
    - Changing the copied value **does not affect** the original

✅ **Example:**

```
let myname = "Pranay";

let anothername = myname; // Copying value

anothername = "codeguy";


console.log(myname); // Pranay ✅

console.log(anothername); // codeguy ✅ (Only copy changed)
```

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2. **Heap Memory (Non-Primitive Types)** 💾
    - Used for **reference data types** (objects, arrays, functions)
    - Stores **a reference (memory address) to the actual value**
    - Changing the reference **affects the original object**

✅ **Example:**

```
let userOne = {
  email: "pranay@google.com",
  upi: "user@ybl"
};


let userTwo = userOne; // Both point to the same memory location

userTwo.email = "codeguy@google.com"; // Modifying reference


console.log(userOne.email); // codeguy@google.com ✅ (Both changed)

console.log(userTwo.email); // codeguy@google.com ✅
```