**🧠 Day 2 Goal:**

Understand and use **Arrays**, **Objects**, and **Loops** like a pro, so you can build smarter logic in projects (and use APIs effectively).

**🔢 Part 1: Arrays – Your Data Dabba 📦**

**🔹 What is an Array?**

An array is an **ordered list of items**.

js

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const dishes = ["Dosa", "Idli", "Pav Bhaji", "Biryani"];

**🧪 Accessing Elements:**

js

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console.log(dishes[0]); // Dosa

console.log(dishes.length); // 4

**✅ Why Arrays Are Powerful:**

* Lists of users
* Search results
* Menu items
* Chat messages
* AI model outputs

**🧰 Part 2: Looping Through Arrays**

**🔄 For Loop:**

js

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for (let i = 0; i < dishes.length; i++) {

console.log(`Menu Item ${i + 1}: ${dishes[i]}`);

}

**🔄 For…of Loop (cleaner):**

js

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for (let item of dishes) {

console.log("Khaane mein aaj: " + item);

}

**👨‍👩‍👧 Part 3: Objects – Real-Life Entity Boxes**

**🔹 What is an Object?**

An object stores **key-value pairs**, just like real-world things.

js

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const student = {

name: "Riya",

age: 20,

isCoder: true

};

**🧪 Accessing Properties:**

js

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console.log(student.name); // Riya

console.log(student["age"]); // 20

**✅ Why Objects Are Powerful:**

* User profiles
* API responses
* Product data
* ChatGPT messages like {role: "user", content: "Hello!"}

**🔁 Part 4: Looping Over Objects**

js

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for (let key in student) {

console.log(`${key}: ${student[key]}`);

}

**🤝 Part 5: Arrays of Objects – Industry Standard Combo**

js

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const users = [

{ name: "Ravi", age: 22 },

{ name: "Pooja", age: 19 },

{ name: "Amar", age: 25 }

];

**🧪 Loop Over All:**

js

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for (let user of users) {

console.log(`${user.name} is ${user.age} years old`);

}

**💥 Real-life Use:**

* List of users, posts, comments, recipes, cars — **everything** in web development!

**🧪 Mini Challenge (Your Turn!)**

**🔧 Task:**

Create an array of 3 desi street foods with price info, like:

js

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const streetFoods = [

{ name: "Vada Pav", price: 20 },

{ name: "Momos", price: 50 },

{ name: "Pani Puri", price: 30 }

];

Now write a loop that logs:

nginx

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Vada Pav - ₹20

Momos - ₹50

Pani Puri - ₹30

**🏁 Summary of Day 2:**

| **Concept** | **Description** |
| --- | --- |
| Array | List of items ([]) |
| Object | Named data ({}) |
| For loop | Classic iteration |
| For...of | Easy loop over arrays |
| For...in | Loop over object keys |
| Combo | Arrays of objects = 🔥 dev skill |