### **Functions**

A function is a reusable block of code that performs a specific task. Functions can take inputs (parameters) and return outputs.

#### **Declaring Functions**

function greet(name) {

return "Hello, " + name;

}

console.log(greet("Mohan")); // Hello, Mohan

#### **Arrow Functions**

const add = (a, b)=> a + b;

console.log(add(3, 5)); // 8

### **Arrays**

An array is an ordered collection of values (elements) that can be of any type.

#### **Creating and Modifying Arrays**

let fruits = ["Apple", "Banana", "Orange"];

fruits.push("Grapes"); // Adds at end

fruits.pop(); // Removes last item

fruits.unshift("Mango"); // Adds at start

fruits.shift(); // Removes first item

console.log(fruits);

fruits.includes('banana'); // true

fruits.indexOf('orange'); // 2

fruits.find(fruit => fruit.length > 5); // 'banana'

#### **Array Methods (map, filter)**

let numbers = [1, 2, 3, 4, 5];

let squared = numbers.map(num => num \* num);

console.log(squared); // [1, 4, 9, 16, 25]

let evenNumbers = numbers.filter(num => num % 2 === 0);

console.log(evenNumbers); // [2, 4]

**Objects:**

An object is a collection of key-value pairs (properties) where keys are strings (or Symbols) and values can be any data type.

#### **Objects and Accessing Properties**

let person = {

name: "John",

age: 30,

city: "New York"

};

console.log(person.name); // Dot notation

console.log(person["age"]); // Bracket notation