Exploring Objects and Their Internal Representation in JavaScript

1.Objects are fundamental. They are versatile data structures that allow developers to represent and manipulate complex data and structures.
2.Objects are internally represented in JavaScript is crucial for writing efficient and bug-free code.
3.Objects are different than primitive datatypes (i.e. number, string, boolean, etc.)it contain one value but Objects can hold many values in form of Key: value pair. An object is a composite data type that groups related data and functionality together. Objects can be created using literals, constructors, or classes, making them one of the most flexible and powerful features of the language.
Objects are:

1.Variables	Contains single value and Mutliple values.	Ex: Single Value: let person = "John Doe";
		Multiple value: let person = {firstName:"John", lastName:"Doe", age:50, eyeColor:"blue"};	

2.Properties	The named values, in JavaScript objects, are called properties.	**Property** **Value** firstName John lastName Doe age 50 eyeColor blue	Accessing JavaScript Properties: 1.objectName.property // person.age 2.objectName["property"] // person["age"] 3.objectName[expression] // x = "age"; person[x]
3.Methods	An object method is an object property containing a function definition.	**Property** **Value** firstName John lastName Doe age 50 eyeColor blue fullNamefunction() {return this.firstName + " " + this.lastName;}	Accessing JS Methods objectName.methodName()

Creating Objects In JavaScript :

Object Literal	• Create a single object, using an object literal.	const person = {firstName:"John", lastName:"Doe", age:50, eyeColor:"blue"};
Using the JavaScript Keyword new	• Create a single object, with the keyword new.	var person = new Object(); person.firstName = “John”;person.lastName = “Doe”;

Object with Constructor	• Define an object constructor, and then create objects of the constructed type.	function Vehicle(name, maker) { this.name = name; this.maker = maker;}
		let car1 = new Vehicle(’Fiesta’, 'Ford’);
		let car2 = new Vehicle(’Santa Fe’, Hyundai’)
		console.log(car1.name);
		Fiestaconsole.log(car2.name);

Object.create method	• Create an object using Object.create().	var Animal = { type: 'Invertebrates', displayType: function() { console.log(this.type); }};
		Create new animal type called animal1
		var animal1 = Object.create(Animal);
		animal1.displayType();