**Objects and its internal representation in Javascript :**

In JavaScript, **objects** play a crucial role and serve as the building blocks for modern JavaScript.

* An object in JavaScript is an unordered collection of related data. It can contain a mix of primitive data types (such as numbers, strings, booleans, null, undefined, and symbols) as well as reference data types.
* Unlike primitive data types that store a single value each, objects are more complex and can hold various combinations of values.
* When you assign a reference value to a variable, it receives a reference or pointer to the actual object stored in memory. The variable itself doesn’t store the value directly.
* Eg. If your object is a student, it will have properties like name, age, address, id, etc and methods like updateAddress, updateNam, etc.

**Object methods**

* An object method is an object property containing a function definition.
* i.e.,
* Let’s assume to start the car there will be a mechanical functionality. and so similar is to stop/brake/headlights on & off, etc.  
  So, conclusion and simple definition for Java Script Object methods is “Methods are actions that can be performed on objects.”

**Create JavaScript Object with Object Literal**

* One of easiest way to create a javascript object is object literal, simply define the property and values inside curly braces as shown below
* let bike = {name: 'SuperSport', maker:'Ducati', engine:'937cc'};

## Create JavaScript Object with Constructor

Constructor is nothing but a function and with help of new keyword, constructor function allows to create multiple objects of same flavor .

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); //Output: Fiesta

console.log(car2.name); //Output: Santa Fe

## Using the JavaScript Keyword new

The following example also creates a new JavaScript object with four properties:

var person = new Object();

person.firstName = “John”;

person.lastName = “Doe”;

person.age = 50;

person.eyeColor = “blue”;

## Using the Object.create method

Objects can also be created using the Object.create() method. This method can be very useful, because it allows you to choose the prototype object for the object you want to create, without having to define a constructor function.

// Animal properties and method encapsulation

var Animal = {

type: 'Invertebrates', // Default value of properties

displayType: function() { // Method which will display type of Animal

console.log(this.type);

}

};

// Create new animal type called animal1

var animal1 = Object.create(Animal);

animal1.displayType(); // Output:Invertebrates

// Create new animal type called Fishes

var fish = Object.create(Animal);

fish.type = 'Fishes';

fish.displayType();

// Output:Fishes