**Objects and its internal representation in JavaScript**

## Object:

## In JavaScript, an object is a standalone entity, with properties and type. Compare it with a cup, for example. A cup is an object, with properties. A cup has a color, a design, weight, a material it is made of, etc. The same way, JavaScript objects can have properties, which define their characteristics.

## Creating Objects in JavaScript:

1. By object literal
2. By creating instance of Object directly (using new keyword)

## By 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:

**Object = {property1:value1, property2:value2….propertyN:valueN}**

Property and value is separated by colon (:).

Example:

var person = {fname:”XXXX”,lname:”YYYY”,age:25};

let bike = {name: “SuperSport”, maker: “Ducati”, engine: “937cc”};

## By creating instance of Object directly (using new keyword):

The syntax of creating object directly is given below:

**var obejctname = new object();**

Here, new keyword is used to create object.

Example:

var emp = new object();

emp.id = 101;

emp.name = “XXX”;

emp.salary = 50000;

**Accessing JavaScript Object:**

The syntax of accessing the property of an object is:

**objectName.property (or) objectName[“property”]**

Accessing ‘name’ from person object below mentioned example using dot operator,

**var person = new object();**

**person.name = ‘Test’;**

**person.designation = ‘Software Developer’;**

**person.salary = 50000;**

Unassigned properties of an object are “**undefined”** (and not null)

person.address; // undefined.

Accessing ‘name’ from person object below mentioned example using [],

**person[“name”] = ‘Test’;**

**person[“designation”] = ‘Software Developer’;**

**person[“salary”] = 50000;**

# 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 as shown below,

function Person(name,designation){

this.name = name;

this.designation = designation;

}

let p1 = new Person(‘Test’,’Software Developer’);

let p1 = new Person(‘Sample’,’Technical Support’);

console.log(p1.name);

console.log(p2.name);