

JS Object & It's Methods

Object -

Object is an real time entity. Object is entity having state and behavior. All real world things are object. e.g. Car, Chair, Pen, Bike, Table and many other physical things are objects.

JavaScript is an object-based language. Everything is an object in JavaScript. JavaScript is template based not class based. Here, we don't create class to get the object. But, we direct create objects.

Object Creation in JavaScript -

There are 3 ways to create objects -

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

Object is created using { }. The data inside object are present in pair format. That format are key-value pair format.

1. By object literal -

Object = {key1:value1,key2:value2,key3:value3...keyN:valueN}

We can create as many object we want in js.

```
<script>
student={rollno:102,name:"vitthal patil",marks:78.00}
document.write(student.rollno+" "+student.name+" "+student.marks);
</script>
```

2. By creating instance of object directly -
Here, new keyword is used to create object.

```
<script>
var emp=new Object();
emp.id=151;
emp.name="Diksha Jadhav";
emp.salary=25000;
document.write(emp.id+" "+emp.name+" "+emp.salary);
</script>
```

3. By using object constructor -
Here, we need to create function with arguments. Each argument value can be assigned in the current object by using this keyword. The this keyword refers to the current object.

```
<script>
function product(id,name,price){
this.id=id;
this.name=name;
this.price=price;
}
p=new product(107,"Vikas Seami",27000);
document.write(p.id+" "+p.name+" "+p.price);
</script>
```

Above are three ways of creating object.

Following is a different types of object method -

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1.	Object.assign()	This method is used to copy enumerable and own properties from a source object to a target object
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2. `Object.create()` This method is used to create a new object with the specified prototype object and properties.

3. `Object.defineProperty()` This method is used to describe some behavioral attributes of the property.

4. **Object.setPrototypeOf()** This method sets the prototype of a specified object to another object.

5. `Object.values()` This method returns an array of values.