**Write a blog about objects and its internal representation in Javascript**

* Objects in JavaScript are a fundamental data type that allows developers to store and manipulate data in a structured manner. They are similar to objects in other programming languages, such as dictionaries in Python or hashes in Ruby.
* JavaScript objects are created using the object literal notation, which is denoted by curly braces {}. For example, the following code creates an object called "person" with properties "name" and "age":

**Ex:**

**let person = {**

**name: "John",**

**age: 30**

**};**

* Properties can be accessed using the dot notation, like this:

**console.log(person.name); // Output: "John"**

**console.log(person.age); // Output: 30**

* Objects in JavaScript are also dynamic, which means that properties and methods can be added or removed at any time. For example, we can add a new property to our "person" object like this:

**person.gender = "male";**

**console.log(person.gender); // Output: "male"**

* In terms of internal representation, JavaScript objects are implemented as a hash table, also known as an associative array or dictionary. Each property in an object is stored as a key-value pair, where the key is a string and the value can be any data type.
* When a property is accessed, the JavaScript engine uses the key to look up the corresponding value in the hash table. This allows for efficient access and manipulation of properties, as the engine can quickly find the desired property without having to iterate through all of the properties in the object.
* In addition to properties, objects can also have methods, which are functions that can be invoked on the object. Methods are defined in the same way as properties, but they are assigned a function as the value, instead of a data type.
* For example, the following code defines a **"greet"** method on our **"person"** object:

**person.greet = function() {**

**console.log("Hello, my name is " + this.name);**

**};**

**person.greet(); // Output: "Hello, my name is John"**

* **In conclusion**, JavaScript objects are a powerful and flexible data type that allow developers to store and manipulate data in a structured manner. They are implemented as a hash table, which allows for efficient access and manipulation of properties and methods. Understanding the internal representation of JavaScript objects is important for writing efficient and performant code.