# Objects and their internal representation in JavaScript

Objects are a fundamental concept in JavaScript. They are a collection of key-value pairs. The key is a string used to access the corresponding value. Objects are used to store and manipulate data in JavaScript. Understanding how objects are represented internally is important for writing efficient code.

## Internal representation of objects in JavaScript

Objects in JavaScript are represented as dynamic variables. This means that objects can be changed at runtime by adding or removing properties or methods. The internal representation of objects in JavaScript is as a collection of key-value pairs stored in a hash table. The key is the property name, and the value is the property value.

## Creating objects in JavaScript

Objects in JavaScript can be created using several methods, including object literals, constructor functions, and the Object.create() method. Object literals are the easiest way to create objects in JavaScript. They are created using curly braces {} and properties are defined using a key-value syntax. Constructor functions are used to create objects that have the same properties and methods. The Object.create() method creates a new object with a specified prototype object.

## Accessing properties of an object

To access properties of an object, you can use dot notation or bracket notation. Dot notation is used when you know the name of the property beforehand. Bracket notation is used when the property name is dynamic and stored in a variable. The property name is passed inside brackets.

## Conclusion

Understanding how objects are represented internally in JavaScript is important for writing efficient code. Objects are a fundamental concept in JavaScript and are used to store and manipulate data. Objects can be created using several methods, and properties can be accessed using dot notation or bracket notation.

example:

var bike = {

name: "R15",

color: "blue",

milage: 35,

speed: 150

}

console.log(bike) -> output -> { name: "R15", color: "blue", milage: 35, speed: 150 }