Objects and its internal representation in Javascript

The Object class represents one of JavaScript's data types. It is used to store various keyed collections and more complex entities.

It's a collection of properties, and a property is an association between a name (or key) and a value. A property's value can be a function, in which case the property is known as a method.

In JavaScript, almost "everything" is an object.

- Booleans can be objects (if defined with the new keyword)
- Numbers can be objects (if defined with the new keyword)
- Strings can be objects (if defined with the new keyword)
- Dates are always objects
- Maths are always objects
- Regular expressions are always objects
- Arrays are always objects
- Functions are always objects
- Objects are always objects

In other words

- Collection of a particular Data. Object can contain an array.
- If I need to save details of 40 students , I will not create 40 separate variables , I will create one object and save 40 students' data.
- What will happen is instead of using 40 storage spaces it will use only one storage.

Example & Dot notation and brackets

```javascript
let student  = {
        name :"Gopi",
        dept: "CSE",
        college: "Anna university",
        address: "CEG",
        marks: [1, 2, 3, 4, 5],
};
```

console.log(student["address"]) square brackets are used to access dynamic objects.

Or

console.log(student.address) - Dot Notation is used to access in specific object.

How to add a element to the object.

```javascript
let student  = {
        name :"Gopi",
        dept: "CSE",
        college: "Anna university",
        address: "CEG",
        marks: [1, 2, 3, 4, 5],
};
student ["subject"] ="javascript";
student ["dept"] = "IT"
console.log(student);
```