Module 8) JavaScript
Objects

Question 1: What is an object in JavaScript? How are objects different from arrays?

Answer :
An object in JavaScript is a collection of key-value pairs where each key (called a property) has a value that can be a string, number, function, or another object. Objects are used to store structured data.

Objects are different from arrays because arrays store data in an ordered list using numeric indexes, while objects store data in key-value pairs, making them more flexible for representing real-world entities.

Question 2: Explain how to access and update object properties using dot notation and bracket notation.

Answer :

You can access and update object properties using dot notation (`object.property`) or bracket notation (`object["property"]`).

Example:

```
// Accessing properties
let person = { name: "John", age: 25 };

// Dot notation
document.write("Name: " + person.name + "<br>");

// Bracket notation
document.write("Age: " + person["age"] + "<br>");

// Updating properties
person.name = "Doe"; person["age"] = 30;
document.write("Updated Name: " + person.name + "<br>");
document.write("Updated Age: " + person["age"] + "<br>");
```