Module – 1: Node - JavaScript Fundamental

Q1 : What is the difference between Java & JavaScript?

Java is an OOP programming language, and it helps to create applications that function in a virtual machine or browser, while JavaScript is an OOP scripting language. Also, the JavaScript code runs on a browser only.

Q2. What is JavaScript?

JavaScript is a lightweight, interpreted programming language with object-oriented capabilities that allows you to build interactivity into otherwise static HTML pages.

Q3. What are the data types supported by JavaScript?

 There are seven primitive data types, Number, String, Boolean, NULL, Undefined and Symbol and one non-primitive data type ‘object’.

Q4. What are the scopes of a variable in JavaScript?

The scope of a variable is the **region** of your program in which it is **defined**. JavaScript variable will have only two scopes.  
• **Global Variables** − A global variable has global scope which means it is visible everywhere in your JavaScript code.  
•**Local Variables** − A local variable will be visible only within a function where it is defined. Function parameters are always local to that function

Q5. What is Callback?

A **callback** is a plain JavaScript function passed to some method as an argument or option. It is a function that is to be **executed** after another function has finished executing, hence the name ‘**call back**‘. In JavaScript, functions are objects. Because of this, functions can take functions as arguments, and can be returned by other functions.

Q6. What is Closure? Give an example.

**Closures** are created whenever a variable that is defined outside the **current scope** is accessed from within some inner scope. It gives you access to an outer function’s scope from an inner function. In JavaScript, closures are created every time a function is created. To use a closure, simply define a function inside another function and expose it.

Q7. What is the difference between the operators ‘==‘ & ‘===‘?

The main difference between the == and === operator in javascript is that the == operator does the type conversion of the operands before comparison, whereas the === operator compares the values as well as the data types of the operands.

Q8. What is the difference between null & undefined?

Null: It is the intentional absence of the value. It is one of the primitive values of JavaScript. Undefined: It means the value does not exist in the compiler.

Q9. What would be the result of 2+5+”3″?

Since 2 and 5 are integers, they will be added numerically. And since 3 is a string, its concatenation will be done. So the result would be 73. The ” ” makes all the difference here and represents 3 as a string and not a number.

Q10. What is the difference between Call & Apply?

The **call()** method calls a function with a given this value and arguments provided individually.

Syntax=

fun.call(thisArg[, arg1[, arg2[, ...]]])

The **apply()** method calls a function with a given this value, and arguments provided as an array.

Syntax=

fun.apply(thisArg, [argsArray])