Difference between LET , VAR & CONST

var	let	const
The scope of a <u>var</u> variable is functional or global scope.	The scope of a <u>let</u> variable is block scope.	The scope of a <u>const</u> variable is block scope.
It can be updated and re-declared in the same scope.	It can be updated but cannot be re-declared in the same scope.	It can neither be updated or re-declared in any scope.
It can be declared without initialization.	It can be declared without initialization.	It cannot be declared without initialization.
It can be accessed without initialization as its default value is "undefined".	It cannot be accessed without initialization otherwise it will give 'referenceError'.	It cannot be accessed without initialization, as it cannot be declared without initialization.
These variables are hoisted.	These variables are hoisted but stay in the temporal dead zone untill the initialization.	These variables are hoisted but stays in the temporal dead zone until the initialization.

EXAMPLES:-

```
VAR:-
var a = 5;
var b = 6;
var c = a + b;
console.log(c);
output= 11
LET:-
let x = 5;
let y = 6;
let z = x + y;
console.log(z);
output= 11
CONST:-
const x = 15;
const y = 16;
const z = x + y;
console.log(z);
output= 31
```

Global Execution Context

Global Execution Context is also called the base/default execution. Any JavaScript code which does not reside in any function will be present in the global execution context. The reason behind its name 'default execution context' where the code begins its execution when the file first loads in the web browser. GEC performs the two following tasks:

- Firstly, it creates a global object where it is for Node.js and Window object for the browsers.
- o Secondly, reference the Windows object to 'this' keyword.
- o Create a memory heap in order to store variables and function references.
- o Then it stores all the functions declarations in the memory heap area and the variables in the GEC with initial values as 'undefined'.

There are 2 phases in GEC

- Memory Phase
- Code Execution Phase

Ex:-

```
    let x = 'Hello World!';
    function a() {
    console.log('It is the first function');
    function b() {
    console.log('It is the second function');
    }
    b();
    }
    a();
    console.log('It is GEC);
```