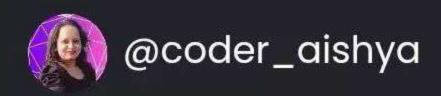




# Es6 Guide

Part 01





## Let & const Keywords

- Variables were previously declared using "var" which had function scope and were hoisted to the top within its scope. It means that a variable can be used before declaration.
- But, the "let" variables and constants
  have block scope which is surrounded by
  curly-braces "{}", they are not hoisted &
  cannot be used before declaration.
- The new const keyword makes it possible to define constants. Constants are read-only, you cannot reassign new values to them.



#### Let example:

```
let x = 10; // Here x is 10

{
  let x = 2; // Here x is 2
}

document.getElementById("demo").innerHTML = x;
//Output : 10
```

### const example:

```
var x = 10;// Here x is 10
{
  const x = 2;// Here x is 2
}

document.getElementById("demo").innerHTML = x;
//Output : 10
```





## **Arrow Functions**

- It provides a more concise syntax for writing function expressions by removing the "function" and "return" keywords.
- Arrow functions are defined using the fat arrow (=>) notation.
- Unlike ordinary functions, arrow functions do not have their own this keyword.
- The value of this inside an arrow function is always bound to the value of this in the closest non-arrow function.
- Arrow functions are not hoisted. They must be defined before they are used.



## **Arrow function Example:**

```
// ES5 Function Expression
var sum = function(a, b) {
   return a + b;
}
console.log(sum(2, 3)); // Output : 5

// ES6 Arrow function
var sum = (a, b) => a + b;
console.log(sum(2, 3)); // Output : 5
```

# Multi-line Strings

Users can create multi-line strings by using back-ticks(). In ES5 we needed to use \n' for multi line statements





## **Template Literals**

ES6 introduces very simple string templates along with placeholders for the variables. The syntax for using the string template is **\${PARAMETER}** and is used inside of the back-ticked string.

```
//ES5 Sytax
var name = 'Your name is ' + firstName + ' ' + lastName + '.'
//ES6 syntax
var name = `Your name is ${firstName} ${lastName}.`
```



### **Default Parameters**

ES6 allows function parameters to have default values. But, in ES5, OR operator had to be used.

```
//ES5 syntax
var calculateArea = function(height, width) {
  height = height || 50;
  width = width || 80;
  // logic
}

//ES6 syntax
let calculateArea = function(height = 100, width = 50) {
  // logic
}
```

