**Variables in JavaScript**

Variables are Containers for Storing Data in other word we can say that Variable is the name of a memory location where we stores some data.

* The name of variable can be changed.
* The name of variable is always meaningful .

Like int age =56;

Note

**JavaScript provide a future**

The value of a JavaScript variable can be changed during the execution of a program . (if we store a string in a variable we can also store number, array, object in same variable) that is called dynamically typed language.

example

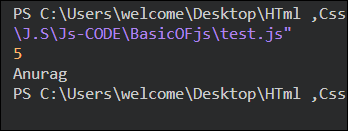
let m=5;

console.log(m);

m="Anurag";

console.log(m);

Output



* Dynamic typing means we can change the type of variable in runtime.
* Static typing means first we need to declare the type of variable like int , float ,char etc.
* JavaScript has dynamic types. This means that the same variable can be used to hold different data types:

let x;         *// Now x is undefined*

x = 5;         *// Now x is a Number*

x = "John";    *// Now x is a String*

console.log(x);

console.log(typeof(x));

**There are specific rules we must follow while naming a variable:**

* Variables are case sensitive. Means small a and capital A both are different variable.
* A variable name can contain alphabets, digits, and underscore (\_) and $ sign only. But first character of a variable name must be alphabet or underscores(\_) and $ sign .
* White spaces and comma cannot be used.
* The name should not be reserved keyword.

**JAVASCRIPT NAMING CONVENTIONS**

* **camelCase (used in JS)**
* **PascalCase (used in JS)**
* **snake\_case**
* camelCase naming convention we use in JavaScript for Variable , Booleans, Functions, Methods
* PascalCase naming convention we use in JavaScript for Class, Components
* Snake\_case naming convention we use in JavaScript for Constants

Declaration of variable in JavaScript.

let myName;

let myAge;

initialization of variable in JavaScript.

myName =”Anurag”;

myAge = 22;

Declaration and initialization of variable in JavaScript.

Let myName = “Anurag”;

Let myAge = 22;

In JavaScript we can create a variable with the help of three Keyword

* **var Keyword**
* **let Keyword**
* **conct Keyword**

*//Now we are not use var keyword because var is a part of old JavaScript.*

*//var is used in ECMA Script 5(ES 5) and earlyer version.*

*Now we are use let and const keyword because let and const is a part of new JavaScript.*

*let and const keyword introduce ECMA Script 6(ES6)*

**var keyword:-**

If we declare a variable from var keyword. then we can also re-declare the variable with the same name of variable and also re-assign the value(value of variable may or may not be same data type) in the same name of variable.

var myName="Anurag";*// Declare and initialized with var keyword*

var myName="Priti"; *// Re- declare and re-initialize with same variable name*

myName="Kavita";    *//Re-assign the value. in same variable name(Update)*

console.log(myName);

**let keyword:-**

If we declare a variable from let keyword . then we can’t re-declare the variable with the same name of variable but re-assign the value(value of variable may or may not be same data type) in the same name of variable.

let myName="Anurag";*// Declare and initialized with let keyword*

let myName="Priti"; *// Can not re- declare with same name of variable*

myName="Kavita";    *//Re-assign the value. in same variable name(Update)*

console.log(myName);

**Const:-**

If we declare a variable with const keyword. then neither re-declare the variable with same name of variable nor re-again with the its value in same name of variable.

const myName="Anurag";*// Declare and initialized with const keyword*

const myName="Priti"; *// Can not re- declare with same name of variable*

myName="Kavita";    *// Can not Re-assign the value. in same variable name(Update)*

console.log(myName);

**2.** Var is globally scoped while let and const are blocked scoped.

**3.** var variable and let initialized with undefined whereas const variable are not Initialized with undefined.

var age; // initialized with undefined

let name;// initialized with undefined

const x; // we can’t initialized with undefined

document.write(age,name)

const must be initialized during the declaration of const.