Primitive Types & Reference Types in JavaScript

JavaScript automatically types a variable based on what kind of information you assign to it (e.g., that '' or” “to indicate string values). You don’t have to specify what type of information will be stored in a variable in advance

## Primitive Type

A primitive type has a fixed size in memory. For example, a number occupies eight bytes of memory, and a Boolean value can be represented with only one bit. The number type is the largest of the primitive types. If each JavaScript variable reserves eight bytes of memory, the variable can directly hold any primitive value.

**Types of Primitive value**

* null
* undefined
* Boolean
* Number
* String

var college="JNU Delhi";// Primitive type i.e. String

var IsPrivate=false;// Primitive type i.e. Boolean

const collgeCode=012445;// Primitive type i.e. Number and constant. It can't be modified further if we'll try then get error as result.

console.log (college, collgeCode);

## Reference types

A reference type can contain other values. Since the contents of a reference type cannot fit in the fixed amount of memory available for a variable, the in-memory value of a reference type is the reference itself (a memory address).

**Types of Reference value**

* Array
* Object

var arr= ["java","C++",".Net","C","Perl"] // Reference type i.e. Object

console.log (value)

var student= { // Reference type i.e. Object

Name:'Aamir',

Id: 12455

}

Difference between let and var

**Let**

*let* gives you the privilege to declare variables that are limited in scope to the block, statement of expression unlike *var*.

let name = “this is a let variable”;

**var**

var is rather a keyword which defines a variable globally regardless of block scope.

var name = “this is a var variable”;

Type Conversion

var value=true;

value = Number(value);// Converting a Boolean into Number Value

document.write (value+"<br>");

var stringVal="Leopard";

stringVal = Number(stringVal);// Try to Convert a String into Number Value but It will give an Error "NaN"

document.write (stringVal+"<br>");

var num=5482;

var StringValue = String(num);// Converting a Number into String Value

document.write (StringValue+"<br>");

we can check the data type through the console.log(typeOf variable);