**DATA TYPE IN JAVASCRIPT**

Data type is used to define a variables. means in this container which type of data are stored.

**Primitive Data-type Non Primitive Data-type**

(NN BB SS U)

* Null Object
* Number Array
* Boolean
* BigInt
* String
* Symbol
* Undefined

**Note**

* in JavaScript data type depend on value of variable.
* JavaScript has dynamic types. This means that the same variable can be used to hold different data type

let x;

console.log(typeof(x))  // Now x is undefined

console.log(n)

x = 5;

console.log(typeof(x))  // Now x is a Number

console.log(n)

x = "John";

console.log(typeof(x)) // Now x is a String

console.log(n)

* When adding a number and a string, JavaScript will treat the number as a string.

let number= 36;

let Name  = "Anurag";

console.log(number+Name)//36Anurag

* JavaScript evaluates expressions from left to right. Different sequences can produce different results:

let n = 16 + 4 + "Volvo"

console.log(n) // 20Volvo

* All JavaScript numbers are stored as decimal numbers (floating point).
* JavaScript numbers are always one type: double (64-bit floating point).

**Primitive Data-type vs Reference Data-type**

**Primitive Data Type**

* Primitive data Type are static values
* Let Num\_1=10;  ==> static value( Means we can not add , update …)

if x = 3.14, you can change the value of x, but you cannot change the value of 3.14. 3.14 never be 3.8

* Region for this JavaScript  knows how much space required for storing this value in memory.
* Primitive values directly stored  in stack memory but reference value (Array, Object, Function ) stored in heap memory.
* When you declare a primitive data type in JavaScript, it is stored on a stack. A stack is a simple data structure that the computer uses to store and retrieve data quickly.

/Refernce Datat-type

/\*Primitive data Type are dynamic  values

Let arr1=[4, 5, 6, 8];  ==> Dynamic value( Means we can  add , update , delete…)

Region for this JavaScript can not determine  how much space required for storing this value in memory. \*/

let arr1=[2,4,6,8];

let arr2=arr1;

console.log("Value of arr1 is " ,arr1);

console.log("Value of arr2 is ",arr2);

arr1.push(9,10);

console.log("After Adding the value in arr1");

console.log("Value of arr1 is " ,arr1);

console.log("Value of arr2 is " ,arr2);