Assignment Day1: 14/07/2020

Brief introduction of available datatypes in Javascript

JavaScript has seven types. Types are values that JavaScript can have. Below is a list of data types that JavaScript can have:

- Number
- String
- Boolean
- Undefined
- Null
- Object
- Symbol

Primitive Datatypes:

Numbers:

A number data type can be an integer, a floating point value, an exponential value, a ‘NaN’ or a ‘Infinity’.

Ex:

```
 var a=250;  // integer value
var b=25.5;  // a number containing a decimal
var c = 10e4 //  an exponential value
```

For NaN :

```
   ‘hi’ * 5; // returns NaN
typeof(NaN);  // returns a number
```

String:

The string data type in JavaScript can be any group of characters enclosed by a single or double-quotes or by backticks.

Ex:

```
var str1 = “This is a string1”;  // This is a string primitive type or string literal
var str2= ‘This is a string2’;
var str3 = `This is a string3`;
```

Boolean:

The boolean data type has only two values, true and false. It is mostly used to check a logical condition. Thus Booleans are logical data types which can be used for comparison of two variables or to check a condition. The true and false implies a ‘yes’ for ‘true’ and a ‘no’ for ‘false in some places when we check a condition or the existence of a variable or a value.

Ex:
typeof(true) // returns boolean
typeof(false) // returns boolean

Undefined:

Undefined data type means a variable that is not defined. The variable is declared but doesn't contain any value.
Ex:

```
a=5;
console.log(a); // This will return 5
```

Null:

The null in JavaScript is a data type that is represented by only one value, the 'null' itself. A null value means no value.
Ex:

```
var a = null;
console.log(a);   // This returns null
```

Symbol:

The 'symbol' data type is new in es6. It is one of the new features of es6. The symbol data type defines a property of an object which is private to the object. It refers to the 'key' of the key-value pair of an object.
Ex:

```
var object1 = {
  name: 'Shalini',
  age: 25,
  city: 'Mumbai'
}
var occupation=Symbol('engineer');
```

Non-Primitive Datatypes:

Object:

An object in JavaScript contains key-value pairs in its address. When we refer to obj1, we are actually referring to the address in memory which contains the value {a: 5, b: 6}, instead of the value {a: 5, b: 6} directly.
Ex:

```
obj1[a] =7;
console.log(obj1) // will return the value {a: 7, b: 6}
```