JS

ES5 -> ES6/ES2015 -> ES7/2016 -> ES8/2017 -> ES9/2018 -> ES10/2019 -> ES11/2020

ES5 -> ECMAScript

SyntaxError -> Variable declaration error

DATA TYPES –

Number, String, Boolean, Undefined,Null,

Symbol(ES2015)-> Value that is unique and cannot be changed,

BigInt(ES2020) -> Large integer that the Number can hold

JavaScript has dynamic typing i.e. , the data type is not required to be manually set, instead it is automatically assigned.

Const val1; //error , missing initializer value for const declaration.

Const x = 100;

x=101 // const value cannot change

int x,y

x=y=20-5-1;

x=y=14 // - has more precedence than = . So, subtraction is initiated first before assignment.

**Type Conversion -**

inputYear = ‘1999’;

console.log(Number(inputYear),inputYear); // 1991 “1991”

console.log(Number(inputYear) + 18); // 2009

console.log(Number(‘Jonas’)) // NaN

NaN -> Not a Number

Console.log(typeof NaN) //Number

Console.log(String(23),23)

**Type Coercion -**

Console.log(‘I am ‘ + 23 + ‘ years old’); // I am 23 years old

+ triggers coercion -> operation between string and number will result in conversion of the number to a string which is coercion.

Without type coercion , the conversion has to be done manually as –

Console.log(‘I am ’ + String(23) + ‘ years old’)

+ -> converts number to string

/, \*, - : converts string to number

‘2’ + ‘3’ + 55 -> 2355

’30’ – ‘10’ – 5 -> 15

‘23’ \* ‘10’ -> 230

‘4’ / ‘2’ -> 2

**Falsy Values -**

Falsy values are values which when converted to Boolean would convert to false.

Values are – 0 , ‘’, undefined, null, NaN . This returns Boolean false.

For values like – Boolean({}), Boolean(‘Jsdflk’) would produce Boolean true.

**Equality Operator -**

=== -> Strict equality operator

== -> loose equality operator

!== -> different operator

Strict equality operator does not allow type coercion. For example,

18 === 18 -> true

18 === 19 -> false

‘18’ === 18 -> false

‘18’ == 18 -> true

Const favourite = prompt(“Question”);

Console.log(favourite); // value e.g 23

Console.log(typeof favourite); // string

If(favourite==23){

}

Favourite===23 // false as ‘23’ != 23

Prompt values are by default string.

To make the value of the prompt equal using === , the prompt needs to be made by default number i.e

Favourite = Number(prompt(“Question”));

**Different Operator –**

If(favourite!=) -> loose different operator

If(favourite!==) -> strict different operator