**JavaScript**

**Javascript:**

**-**programming language

- used for create dynamic content on webpage

-executes code line by line

- it is scripted language and object base language

>>**Two way**

**External** : we create seperate file extention.js and link it to html file using script tag

**Internal** : IN HTML file, we write script tag and in that we add js code

>>**predefine function// how to diplay**

alert()---display the output in popup window

console.log()---display the output in browser console

document.write()--- display o/p as inline in html page,

DOM (Document object Model): display data inside element

Document.getElementById().innerhtml =””

get.ElementByClass()

>>**keywords**

**Es 6 version 2015**

**var-**--redefine the define value

(note: not use var , )

**let** ---not redeclare

must be declare before use

**const –** not redeclared

not reassigned

**Data types**

**String** :represent series of characters and write in quote

**Number** : represent numeric value

**Boolean:** two values true, false

**Object :** it use to store multiple data with different data type

**Array:** multiple values and all data types stored in single variable

**Undefined:** variable without value

**Typeof:** find the datatype of javascript variable

**Default Parameter**

**Rest Parameter**

…c

Return o/p in array

**Spread Operator**

…declare array name/obj/

**Form validation**

isNaN \_\_ not aplpahbet

**operators**

**Arithmetic operation :**used to perform arithmetic on number

+ Addition

- Subtraction

\* Multiplication

\*\* Exponentiation (ES2016)

/ Division

% Modulus (Division Remainder)

++ Increment

-- Decrement

**Comparison operator** o/p---true/false

== check only value

=== check value and datatype

> greater than

< smaller than

<= only value

>= only value

!= (not equal to)

!==

**logical operator**

&&

||

(!x==y)

**if and else**

**if – else** -> if condition true , when condition false the

if if else

nested if(if -else) else

ternary operator--> used for one condition

let signin=0;

let create= signin ==0 ? 'signin':'signup'

alert(create)

Switch

Used for comparison

**POPup box**

Alert

Prompt

Confirm return boolen value

**Loops**

1.While

2.Do while

3.For

Nested for loop

// in array iterate index no or value

For in

//In array iterate values

For of

**Array []**

**Array used to stored multiple value in single variable**

**It can hold various data type**

* Length --- length property return the length(size of array)

console.log(names.length)

🡪**METHOD OF ARRAY**

**shift()** - remove 1st array elements

names.shift()

**pop()** –

remove last element from array names.pop()

**push(‘’) –**

, add new element to array ( at the end

**unshift(‘’)** -

add array element at starting of array

**splice-**

**(index no. for where to start , how much we want to delete value with index no, add value)**

the first parameter --- defines the position where new elements should be added (spliced in).

The second parameter---defines how many elements should be removed.

define the new elements to be added.

names.splice(2, 0, 'II', 'VII')

**slice()—it create new array it get part of exesting array**

**does not remove any elements from the source array.**

let a=names.slice(1, 2) two parameters (starting index , up to index no. )

If you want to blank the give array

console.log(names.lenght=0)

**indexOf() -** used for finding index number

console.log(names.indexOf('A')) || let b =names.indexOf('A')  //with create

console.log(b)

**Array.isArray()** find variable is array or not with Boolean value

**Split()** it convert string into array

**Join()** it convert array into string

**Concat()**

Create new array and merge with existing array

**Sort() sort array an alphabetically**

**Reverse**

**How to check type of array**

**Array.isArray()**

**DOM**

**DOM(Document object Model)** is API(application programming interface )for manipulating HTML document (add remove and modify parts of document).

Style.backgroundImage:”url()”

Src=’//image path ‘

**STRING**

   /t one tab space

    /n   break word to next line

legnth also occupy space

substr

substring

trim   imp

**legnth**  find length of string

also occupy space

**touppercase()** all words

**tolowercase()**

**startsWith()** return boolean value

endsWith()     return boolean value

includes()  return boolean value   search value as it is then give true false

search()   return position

match()  read all string and how much same words available

**1.indexOF(string, start-index):**

-it return index of first occurences of string

-it takes two parameter,1.searching-string

-it start searching of string from left to right.

**2.lastIndexOf(string,start-index):**

-it return index of first occurences of string

-it takes two parameter,1.searching-string,2.start-index.

-it start searching of string from right to left.

3.search():

-it return index of first occurences of string.

-it takes only one parameter 1.searching-string.

-it start searching of string from left to right.

-it is faster than indexOf

4.slice():

-it return part of given string

-it takes +ve and -ve value.

-if write +ve value it start searching from left to right.

-if write -ve value it start searching from right to left.

5.subString():

-it return part of given string

-it takes only +ve value.

-if write +ve value it start searching from left to right.

6.subStr():

-it return part of given string

-it takes two parameter it will be +ve only

-first parameter is start-index,2.total number of charater

7.charAt(index): it return single charater of given index.

8.charCodeAt(index): it return ASCII code of single charater of given index.

9.concate(): it is use to merge two or more string.

10.replace(): it replace first occurences of given string.

11.trim(): it remove unwanted widespace from bothside of string

**Function**

Reserve func

It is block of code to perform ;particular task

When we create function \_\_\_\_\_\_\_\_\_\_we passed **parameter**

When we call function \_\_\_\_\_\_\_\_\_\_\_\_\_ we passed **argument**

Return keyword in function one time return used

The **return** statement stops the execution of a function and **returns** a value.

**Local variable** : declare inside function

**Global variable** outside or inside

**Anonymous funct:** without function name

Let a =function(){}

**Arrow function :** without function name , and function keyword

Let a = ()=>{}

//function

**setTimeout()** :  calls a function after a number of milliseconds

two parameter passed

setTimeout ( function(){}, sec)

**setInterval()**

**OBJECT {}**

**Objects are containers for Properties and Methods. Properties are named Values. Methods are Functions stored as Properties.**

**It stored different datatype**

**Let objectname ={**

**name:”Akanksha”**

**}**

**---------------------------------------------------------------------------------------------------**

**let obj =new Object()**

**obj.name='Akanksha'**

**obj.age=22**

**console.log(obj)**

this keyword used for current obj display, inside the object

it represent the current object and class

.toUpperCase

Math is object

Math.PI PI-keyword

Math.random

Math.round give round fig value

Math.ceil give large

Math.floor give small

Math.pow

Math.trunc remove point with value

hasOwnProperty()

**Hoisting**

Only for var

Let a ; //declaration

a =’’ //assignment

console.log //print

**Events**

**attributs**

onnclick

onmouseover

onmouseup

onmousedown

onmouseout

oncontextmenu

**addeventListner**