# JavaScript

1) What is JavaScript?
   SOL) - - -

   - JavaScript is a programming language used for creating dynamic content on websites. It is a lightweight, cross-platform and single-threaded programming language.
   - JavaScript is an interpreted language( The interpreter executes code line by line which makes JavaScript synchronous in nature) that executes code line by line providing more flexibility.
   - It is a commonly used programming language to create dynamic and interactive elements in web applications. It is easy to learn.

2) Who invented JavaScript?
   SOL) - - -

   - JavaScript was invented by Brendan Eich in 1995.
   - It was developed for Netscape2, and became the ECMA-262 standard in 1997.
   - After Netscape handed JavaScript over to ECMA, the Mozilla foundation continued to develop JavaScript for the Firefox browser.

3) What is ECMA Script?
   SOL) - - -

   - The full form of ECMA Script is European Computer Manufacturer's Association.
   - ECMAScript is a standard for scripting languages such as JavaScript, etc. It is trademark scripting language specification. JavaScript is a language based on ECMAScript.

4) Who invented ECMAScript?
   SOL) - - -

   - JavaScript was invented by Brendan Eich in 1995 and became an ECMA standard in 1997.
   - ECMAScript is the official name of the language. ECMAScript versions have been abbreviated to ES1,ES2,ES3,ES5, and ES6.
   - Since 2016, version are named by year (ECMAScript 2016,2017,2018,2019,2020.

**CHARACTERSTICS OF JAVASCRIPT - - - - -**

- It is programming language or scripting language which means we can create responses with respect to the program.

- It is a dynamic language which means the JavaScript program can be changed or updated in the upcoming lines based on the requirement.
- It is synchronous language which means the code will execute line by line until it completes the code or encounters the error.
- It is a single threaded language because in JavaScript we have single stack which is call stack.
- It is a high-level programming language which means JavaScript human understandable language.
- It is a Interpreted language.

5) How to write JavaScript program?

SOL)- - - -

- JavaScript program can be performed in two ways they are.
    - i) Internal JavaScript.
    - ii) External JavaScript.

i)      Internal JavaScript - - -
- Internal JavaScript is performed by using script tag with in the html program.
- The script tag must & should be write after writing html code within the body tag.

Example - - -

```
<body>
<h1 id="Name"></h1>
    <h1 id="Age"></h1>
    <h1 id="Gender"></h1>
    <h1 id="Email"></h1>
    <script>
        document.getElementById("Name").innerHTML="Name:Chaitanya"
        document.getElementById("Age").innerHTML="Age:25"
        document.getElementById("Gender").innerHTML="Gender:Male"
        document.getElementById("Email").innerHTML="Email:chaitanya4864@gmail.com"
    </script>

</body>
```
OUTPUT - - -

Name:Chaitanya

Age:25

Gender:Male

Email:chaitanya4864@gmail.com

## II) External JavaScript - - -

- In External JavaScript we use external document with the extension has JavaScript.
- We have to link this external document with the current html file by using script tag, with in the script tag we have to use "src" attribute for the source attribute we have to give URL( **Uniform Resource Locator**)  of external JavaScript file.

Example - - -                  Html document.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <h1 id="a"></h1>
    <script src="D:\WebTechnology-
M18\javascript\day1\external.js"></script>

                (or)
  <script src="./external.js"></script>
//External document
document.getElementById("a").innerHTML="text";
```

text