

CSS

Animation--→ in animation define keyframes to change the properties in the given duration.

Media queries--→these are used for designing responsive web pages.

JavaScript

Javascript	Java
It is a scripting language	It is a programming language
Variable type is dynamically assigned, based on value assigned to it	Variable type is statically assigned, at the time of declaration
It is event driven programming	It is sequential programming
It is object-based language	It is object oriented language

Java script code has to be written in <script> tag. <script> tag can be added in Head/ body tag.

The <script> tag can appear any number of times in the html page.

JavaScript are of 2 types

1. Internal JavaScript
 - a. The JavaScript code is written inside html page
2. External JavaScript
 - a. JavaScript code is written in external .js file, and then added in html page via <script> tag.

In JavaScript to display popup box use following functions, all these functions are of window object

alert	Popup box with ok button
confirm	Popup box with 2 buttons ok and cancel. If user click ok button, it returns true. If user click cancel button, it returns false.
prompt	Popup box with text box If you enter data and click on ok, it return data in string format Otherwise returns undefined

To refresh the page and write data in browser window.

```
document.write("hello");
```

To display messages for developer

```
console.log("this is message in console window")
```

To display messages at the bottom of the page

Add <div> or <p> tag

```
document.getElementById("mydiv").innerHTML="Addition : "+ans;
```

to concatenate the value in innerHTML

```
document.getElementById("mydiv").innerHTML+="Addition : "+ans;
```

parseInt(data)	To convert data into integer
parseFloat(data)	To convert data into float
isNaN(data)	To check whether data is a string. It returns true if the data contains minimum 1 character other than number, otherwise false
isFinite(data)	To check whether given data is a number, it returns true if it is a number, otherwise return false.

Basic data types in JavaScript:

number

string

object

boolean

undefined

Operators in JavaScript

Arithmetic operators

+, -, *, /, %

Logical operators

&&, ||, not

Relational operators

>, <, ==, ===, <=, >=, !=, !==

=== and !== are operators for strict checking

It checks the value and data type both

Functions in string

Str.toUpperCase()	Convert the string in upper case
Str.toLowerCase()	Convert the string in lower case
Str.charAt(index)	To find the character at the given index
Str.Concat(s1,s2,s3)	To concatenate the strings
Str.slice(startindex,[endindex])	To get portion of the string from startindex to end index, end index is excluded
Str.match(pattern)	It finds and returns the string which matches the pattern
Str.replace(pattern,new string)	It will replace the pattern with new string
Str.search(pattern)	It gives position of the first occurrence of the pattern
Str.split(delimiter)	It splits the given string into an array.

