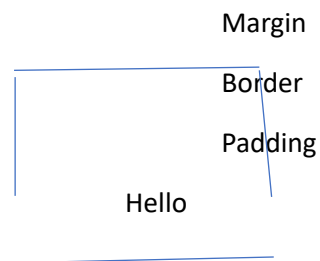Box Model

Border :

Border-style

Border-width

Border-color

Padding : padding is use increase or decrease area of content

Padding property present before border. Padding we can't see.

Margin

Border

Padding

Hello

JavaScript : using JavaScript we can do programming on web page without server.

Using JavaScript we can do event or actions on web page.

JavaScript was object based interpreter scripting language till ES5

JavaScript is object oriented interpreter scripting language from ES6 onwards.

ECMA : European Computer Manufacture Association

ES is concept.

JavaScript, TypeScript or other scripting language are implementation of ES.

OOPs Object Oriented Programming.

Java, Python, C++ are implementation of OOPs concept.

Interpreter   Vs   Compiler

Interpreter and compiler both help to convert one format to another format.

Interpreter check the code line by line and then convert.

Compiler convert all code at time

If we want to write the code using JavaScript we need to use script tag

This tag we can write in between head tag or body tag or without any tag.

Html code

<script type="text/JavaScript">   opening tag

          Coding ……..

</script>   closing tag

Html code

.html

JavaScript is case sensitive.

In JavaScript it is not mandatory every statement end with semi colon.

document   :   pre defined object

 write   : is a function

document.write("Welcome to javaScript");

Inside script we can't use all html tag directly.

JavaScript can't under any html tags.

First welcome program using JavaScript


```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>
    <p>Welcome to HTML Web Page</p>
    <script type="text/JavaScript">
        document.write("<h1>Welcome to JavaScript Program</h1>");

        document.write("<font color='orange'>My Name is Akash
Kale</font><br/>");
        document.write("I am Trainer");
    </script>
</body>
```

```
</html>
```

: variable is a name which hold the value and value can change during the exuection of programs.

a=10

b=20

name="Ravi Kumar"

age=21

info="JavaScript is scripting language";

result = true;

Data types : data type is a type of data which tells what type of value it can hold.

In JavaScript we can declare the variable using **var** keyword till ES5.

From ES6 onward we can use **let** and **const**.

var a; a is a variable which can hold any type of value. By default value of a is **undefined**.

var b=10;

var c=10.10;   b and c are consider as **number** data types.

var fname="Raj Deep";   fname consider as **string** type.

var result = true;   true or false lower case. Result consider as **boolean** type

var obj = new Date();   obj is consider as **object reference** type.

data_type.html

```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>
    <!--html comments -->
    <script type="text/JavaScript">
     var a;
     var m=10;
```

```
        var n=10.10;
        var fname = "Raj Deep";
        var result = true;
        var obj = new Date();
        document.write(a);
        //document.write(b);
        document.write("<br/>Value of m is="+m)
        document.write("<br/>Value of n is="+n)
        document.write("<br/>Value of fname is="+fname)
        document.write("<br/>Value of result is="+result)
        document.write("<br/>Value of obj is="+obj)
        document.write("<br/>")
        document.write(10+10)
        document.write("<br/>")
        document.write("10"+10)
        document.write("<br/>")
        document.write(10+"10")
    </script>
</body>
</html>
```

Operator : JavaScript provided lot of different type of operator which help to maths operations.

Arithmetic operator   :   +, -, *, /, %(modules)

var a=10;

var b=3;

var sum,sub,mul,div,mod;

 sum = 13

sub = 7

mul = 30

div = 3

mod = 1

\>

\>=

<

<=

==

!=

Result can be true or false.

=

a=10;

sum = 10+30;

10=20;   error

10==20   compare

a+b=c+d;   error

a+b==c+d;   compare

===

===   vs   ==

== it check only value doesn't matter their data type

=== it check value as well as their data types.