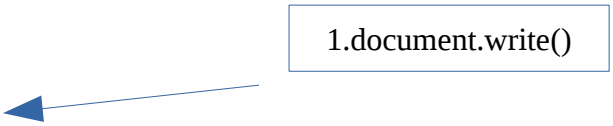
Display output

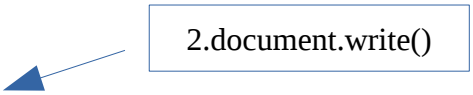
1. Using window.alert()

```
<! DOCTYPE html>
<html lang= "en">
<head><title>HOME</title>
<meta charset="UTF-8">
</head>
<body>
        <script>
                window.alert(1+1);
        </script>
</body>
</html>
```

2. Using document.write()

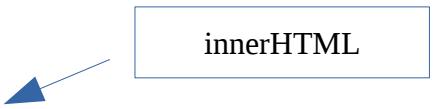
```
<script>
        document.write(1+1);
</script>

 <script>
        <button onclick="document.write(5 + 6)">Try it</button>
</script>
```





3. Using innerHTML

```
<p id="demo"></p>
<script>
document.getElementById("demo").innerHTML = 5 + 6;
</script>
```

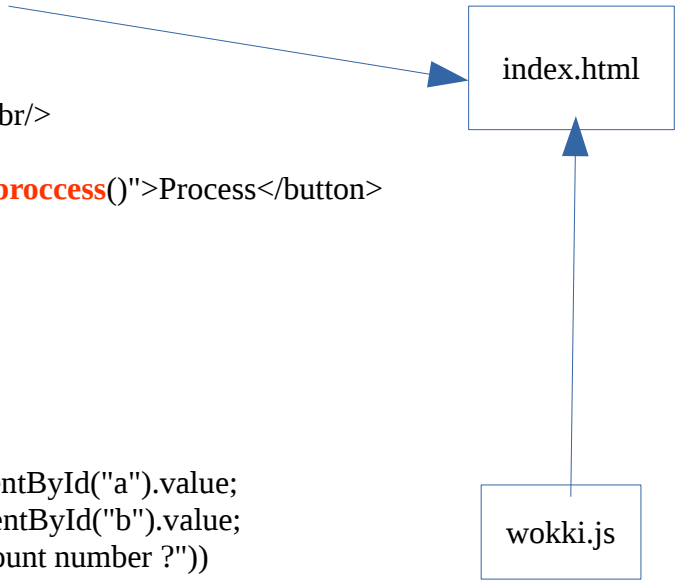


4. Using console (F12 at browser firefox)

```
<script>
        console.log(5 + 6);
</script>
```

Accessing Javascript from another page

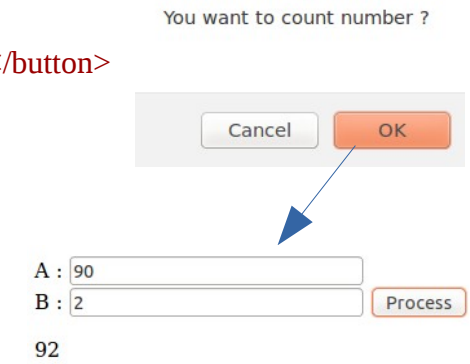
```
<! DOCTYPE html>
<html lang= "en">
<head><title>HOME</title>
<meta charset="UTF-8">
<script src = "wokki.js"></script>
</head>
<body>
A : <input type = "text" id = "a"><br/>
B : <input type = "text" id = "b">
<button type="button" onclick = "proccess()">Process</button>
 <p id = "result"></p>
</body>
</html>
```




```
var proccess = function()
{
	var a = document.getElementById("a").value;
	var b = document.getElementById("b").value;
	if (confirm("You want to count number ?"))
	{
		var c = Number(a)  + Number(b); // +a + +b    // ((+a) + (+b));
		document.getElementById("result").innerHTML = c;
	}
}
```

Dialog box

```
A : <input type = "text" id = "a"><br/>
B : <input type = "text" id = "b">
<button type="button" onclick = "proccess()">Process</button>
 <p id = "result"></p>

<script>
var proccess = function()
{
	var a = document.getElementById("a").value;
	var b = document.getElementById("b").value;
	if (confirm("You want to count number ?"))
	{
		var c = Number(a)  + Number(b); // +a + +b    // ((+a) + (+b));
		document.getElementById("result").innerHTML = c;
	}
}
</script>
```



Input Box

```
<script>
	var a = prompt("Please, enter your name");

	document.write("Length of character include space: ", a.length);
	document.write("<br>");
	document.write("5 first character :" , a.substring(0,5));
	document.write("<br>");
	document.write("Get 3 character start from second character : ", a.substring(1,4));
</script>
```

Length of character include space: 9
5 first character :spide
Get 3 character start from second character : pid

Function (without return value)

```
<script>
	var dividedByTree = function(number)
	{
		var myNumber=number/3;
		document.write(myNumber);
	}
		dividedByTree(6);
</script>
```

Function name : **dividedByTree**

Parameter : **number**

Call function with new parameter : 6

Function (return value number & string)

```
<script>
var dividedByTree = function(number, string)
{
	return number/3 + " " + "Your name is " + " " + string;
}

var myNumber = dividedByTree(6, "wokki");
document.write(myNumber);
</script>
```

Calling another function from function 1

```
Number : <input type = "text" id = "a"> / <input type = "text" id = "b"><br/>
<button type="button" onclick = "processDivide()">Process</button>
 <p id = "result"></p>

<script>
var process = function(numberA, numberB)
{
        return numberA / numberB;
}

var processDivide = function()
{
        var A = document.getElementById("a").value;
        var B = document.getElementById("b").value;

        var resultDivide = process(A,B);
        document.getElementById("result").innerHTML = resultDivide;
}
</script>
```

DOM

Function process
parameter numberA, numberB

Function processDivide
Without parameter

Call function : process
New parameter A,B

Number : 4 / 2
Process

2

Calling another function from function 2

```
<script>
var key = function(h)
{
  var d,s;
  d = 0;
  for(s=1; s<=h; s++)
        {
          d = d + s;
        }
        return d;
}

var key2 = function(h)
{
  var d,s;
  d = 0;
  for(s=1; s<=h; s++)
        {
                d = d + key(s);
                document.write(d);
                document.write("<br>");
        }
}

key2(3);
</script>
```

key
d=0
s=1 <= 3
d=d+s → 0+1=1
→ 1+2=3
→ 3+3=6
key2
d=0
s=1 <=3
d=d+s → 0+1=1
→ 1+3=4
→ 4+6=10

1
4
10

Looping : for, while, do..while

```
<script>
var y;
you = function()
{
   for (y=1; y<=3; y++)
   {
      document.write("coki -> " + y);
      document.write("<br>");
   }
}
you();
</script>
```

for

coki -> 1
coki -> 2
coki -> 3

```
<script>
var y;
y=1;

you = function()
{
   while(y<4)
   {
      document.write("coki -> " + y);
      document.write("<br>");
      y++;
   }
}
you();
</script>
```

while

coki -> 1
coki -> 2
coki -> 3

```
<script>
var y;
y=1;
you = function()
{
   do
   {
      document.write("coki -> " + y);
      document.write("<br>");
      y++;
   }
         while (y<4)
}
you();
</script>
```

do..while

coki -> 1
coki -> 2
coki -> 3

Condition : if . . else ; operator : && (and) , != (not equal), === (equal)

```
<script>
var number;
for (number=1; number<=20; number++)
{
        if ( number % 3 === 0 && number % 5 != 0)
                {       document.write('html' + "<br>");      }
        else if ( number % 5 === 0 && number % 3 != 0)
                {   document.write('css'  + "<br>");    }
        else if ((number % 3 === 0) && (number % 5 === 0))
                {       document.write('javascript' + "<br>");        }
        else
                {   document.write(number + "<br>");        }
}
</script>
```

```
1
2
html
4
css
html
7
8
html
css
11
html
13
14
javascript
16
17
html
19
css
```

Combination while & for

```
<script>
var x,y;
x=0;

you = function()
{
        while(x<3)
        {
                for (y=1; y<=3; y++)
                {
                        document.write("coki -> " + y);
                        document.write("<br>");
                }
                document.write("yummi = " + x);
                document.write("<br>");
                x++;
        }
}

you();
</script>
```

Call function : **you**

```
coki -> 1
coki -> 2
coki -> 3
yummi = 0
coki -> 1
coki -> 2
coki -> 3
yummi = 1
coki -> 1
coki -> 2
coki -> 3
yummi = 2
```

Condition : switch .. case (1)

```
Type your fruit <input type = "text" id="myfruit"> apple, grape, banana<br/>
<button type = "submit" onclick="chooseFruit()">click</button>
<p id = "print"></p>

<script>
var chooseFruit = function()
{
        var fruit = document.getElementById("myfruit").value;
        var fruit = fruit.toUpperCase();
        switch(fruit)
        {
          case 'APPLE':
                document.getElementById("print").innerHTML = "You have choosen Apple";
                break; //stop
          case 'GRAPE':
                document.getElementById("print").innerHTML = "You have choosen Grape";
                break; //stop
          case 'BANANA':
                document.getElementById("print").innerHTML = "You have choosen Banana";
                break; //stop

          default:
            document.getElementById("print").innerHTML =  "You have choosen another fruit = " + fruit  ;
        }
}
</script>
```

Change all text to uppercase

Condition : switch .. case (2)

```
 <input type='text' id="ehem"> naruto, spongebob, rabbit
 <button type="button" onclick="gigi()">click</button>
 <p id="print"></p>

<script>
var getReview = function (movie)
{
  switch(movie)
   {
        case 'NARUTO':     return ("I like naruto movie");      break;
        case 'SPONGEBOB':   return ('Yeah, spongebob is funny movie');  break;
        case  'RABBIT':  return ('Ha..ha..ha ..rabbit movie');   break;
        default :    return ("I don't know");
   }
}
var gigi = function()
{
        var gugu = document.getElementById("ehem").value;
        var gugu = gugu.toUpperCase();
        var nana = getReview(gugu);
        document.getElementById("print").innerHTML = nana;
}
 </script>
```

Combination switch .. case & if .. else ; operator : || (or)

```
<script>
var user = prompt("how old are you");
switch(true)
{
   case (user == 0 || user >=200):
     if (user == 0)
     {   document.write("you are in the mother's
abdomen");    }
     else
     {   document.write("Amazing are you GOD");    }
      break;
  case (user < 17):
      document.write("too young");  break;
   case (user == 17) :
      document.write("sweet seventieth");  break;
   case (user > 17 && user <= 50):
      document.write("mature");  break;
   default :
      document.write("very old");
}
</script>
```

Condition : ternary operator

```
your age <input type = "text" id="age">
<button type="button" onclick="age()">Click</button>
<p id = "text">...</p>
<script>
var age = function()
{
        var danzo = document.getElementById("age").value;
        var hanzo = (danzo < 17) ? "below 17 years" : "17 years above";
        document.getElementById("text").innerHTML = hanzo;
}
</script>
```

Conditional (ternary) operator

Arrays

```
<script>
var wokki = ["clever", "diligent", "expert"]; // arrrays

document.write(wokki); // access all arrays
document.write("<p>");

document.write(wokki[0]);  // access specific arrays
document.write("<br>");
document.write(wokki[1]);
document.write("<br>");
document.write(wokki[2]);
document.write("<p>");

for (var a=0; a<wokki.length; a++) // access all arrays with add string, this is flexible array
{       document.write("I like wokki because " + wokki[a] + "; ");       }
</script>
```

Result in browser

```
clever,diligent,expert

clever
diligent
expert

I like wokki because clever; I like wokki because diligent; I like wokki because expert;
```

Arrays methods (sort ascending, descending)

```
<script>
var urut = [23, 45, 32, 56, 78, 3];
document.write("first numbers : " + urut + "<br>");

/* sort ascending */
urut.sort(function(a, b)
{  return a-b  });
document.write("numbers after sorting ascending : " + urut + "<br>");

/* sort descending */
urut.sort(function(a, b)
{  return b-a  });
document.write("numbers after sorting  descending : " + urut);
</script>
```

first numbers : 23,45,32,56,78,3

numbers after sorting ascending : 3,23,32,45,56,78

numbers after sorting descending : 78,56,45,32,23,3

Arrays methods (splice, sort, reverse)

```
<script>
var ado = ["Banana", "Mango", "Apple"];
document.write("I have 3 fruit first : " + ado + "<p>");

/* 2 = the position where element added,
0 = how many element will should be removed */
ado.splice(2, 0, "Papaya", "Grapes");
document.write("Add 2 fruit more : " + ado + "<p>");

var mak = ado.splice(1, 2);
document.write("deleting : " + mak + "<br>");
document.write("after deleting : " + ado + "<p>");

/* sort and reverse only effective on abjad */
var sortDown = ado.sort();
document.write("sorting data A-Z : " + sortDown + "<br>");
var sortUp = ado.reverse();
document.write("sorting data Z-A: " + sortUp + "<br>");
</script>
```

I have 3 fruit first : Banana,Mango,Apple

Add 2 fruit more : Banana,Mango,Papaya,Grapes,Apple

deleting : Mango,Papaya
after deleting : Banana,Grapes,Apple

sorting data A-Z : Apple,Banana,Grapes
sorting data Z-A: Grapes,Banana,Apple

Arrays property (length) & methods (toString, join, valueOf)

```
<script>
var ado = ["Banana", "Mango", "Apple"];
var ehem =  ado.length; // count array result = 3
document.write("number of arrays = " + ehem + "<br>");
document.write("print arrays = " + ado[0] + " " + ado[1] + " " + ado[2]  + "<br>");

// using loops in array
var urut = "<ul>";
var jeko;
for (jeko = 0; jeko < ado.length; jeko++)
  {  urut += "<li>" +ado[jeko] + "</li>"; }
 urut += "</ul>";
document.write(urut);

var kempes = ado.toString(); // convert array to string
document.write("array to string = " + kempes + "<br>");

var jenggot = ado.join(" * "); // convert array to string using join
document.write("array to string using join = " + jenggot + "<br>");

var konsi = ado; // automatic conversion arrays to string
document.write(konsi + "<br>");

var yoyo = ado.valueOf(); // arrays to string to
document.write(yoyo + "<p>");
</script>
```

number of arrays = 3
print arrays = Banana Mango Apple

Banana
Mango
Apple

array to string = Banana,Mango,Apple

array to string using join = Banana * Mango * Apple

Banana,Mango,Apple

Banana,Mango,Apple

Arrays methods (push, pop, shift, unshift)

```
<script>
var ado = ["Banana", "Mango", "Apple"];

ado.push("Papaya"); /* add new element at last in arrays */
var waca = ado.length; /* count array again result=4 */
document.write("number of arrays after add  papaya = " + waca + "<br>");
document.write("after add last element = " + ado + "<p>");

var kini = ado.pop(); /* delete last element in arrays */
document.write("delete last element in array = " + kini + "<br>");
document.write("after last element deleted = " + ado + "<p>");

var monyo = ado.shift(); /* delete first element in arrays */
document.write("delete first element in array = " + monyo + "<br>");
document.write("after delete first element = " + ado + "<p>");

var mongki = ado.unshift("grape"); /* add new element at first in arrays */
document.write("add new element in first array = " + mongki + "<br>");
document.write("after add new element = " + ado + "<p>");

 ado[0] = "pumpkin";
 document.write("after changing first element = " + ado + "<br>");
</script>
```

```
number of arrays after add papaya = 4
after add last element = Banana,Mango,Apple,Papaya
```

```
delete last element in array = Papaya
after last element deleted = Banana,Mango,Apple
```

```
delete first element in array = Banana
after delete first element = Mango,Apple
```

```
add new element in first array = 3
after add new element = grape,Mango,Apple
```

```
after changing first element = pumpkin,Mango,Apple
```

Arrays methods (max, min)

```
<script>
 var urut = [23, 45, 32, 56, 78, 3];


 var minmax = urut.sort(function(a, b)
{  return a-b });
var min = minmax[0];
document.write("sorting number ascending : " + minmax + "<br>");

 var maxmin = urut.sort(function(a, b)
{ return b-a});
var max = maxmin[0];
document.write("sorting number descending : " + maxmin + "<p>");

document.write("max number : " + max + " & min number : " + min);
</script>
```

```
sorting number ascending : 3,23,32,45,56,78
sorting number descending : 78,56,45,32,23,3

max number : 78 & min number : 3
```

Arrays method (join)

```
<script>
var story1 = ["naruto", "sakura", "sasuke"];
var story2 = ["danzo", "sunade", "takashi"];
var story3 = ["jiraiya"];
var combine = story1.concat(story2, story3);
document.write(combine);
</script>
```

```
naruto,sakura,sasuke,danzo,sunade,takashi,jiraiya
```

Arrays method (slice)

```
<script>
 var jenggo = ["jenggo1", "jenggo2", "jenggo3", "jenggo4"];

 var cumi = jenggo.slice(1,2); // 1 = jenggo2 ; 2 = jenggo3 but not include
 document.write(cumi + "<br>");

 var ngikngok = jenggo.slice(1); // 1 = start from jenggo2 until end
 document.write(ngikngok);
</script>
```

jenggo2
jenggo2,jenggo3,jenggo4

Add & Delete data arrays using DOM

```
Nama : <input type = "name" id = "name">
<button type = "button" onclick = "add()">Add</button>
<button type = "button" onclick = "del()">Delete</button>
<p id = "appear">data</p>
```


```
<script>
var database = []; // empty array

var add = function()
{
        var jonny = document.getElementById("name").value;
        database.push(jonny);
        document.getElementById("appear").innerHTML = database;
}

var del = function()
{
        var jonny = document.getElementById("name").value;
        database.pop(jonny);
        document.getElementById("appear").innerHTML = database;
}
</script>
```

Empty arrays

Function add

Function del

String methods : toUpperCase, toLowerCase

```
<input type="text" id="getText">
<button type = "button" onclick = "myText()">Print </button>
<p id = "print"></p>

<script>
var myText = function()
{
        var text = document.getElementById("getText").value;
        var textUpper = text.toUpperCase();
        document.getElementById("print").innerHTML = textUpper;
}
</script>
```


```
<input type="text" id="getText">
<button type = "button" onclick = "myText()">Print </button>
<p id = "print"></p>

<script>
var myText = function()
{
        var text = document.getElementById("getText").value;
        var textLower = text.toLowerCase();
        document.getElementById("print").innerHTML = textLower;
}
</script>
```

String method : concat

```
a : <input type="text" id="a1"><br/>
b : <input type="text" id="a2">
<button type = "button" onclick = "myText()">Print </button>
<p id = "print"></p>

<script>
var myText = function()
{
        var a1 = document.getElementById("a1").value;
        var a2 = document.getElementById("a2").value;
        var a3 = a1.concat(" ",a2);
        document.getElementById("print").innerHTML = a3;
}
</script>
```

Result same
var a3 = a1 + " " + a2;

String methods : indexOf(), lastIndexOf()

```
<script>
var str = "makan kue coklat kue";
var mas = str.indexOf("kue"); //start 0, k=6
var mas2 = str.lastIndexOf("kue");  // k=17
document.write(mas + "<br>" + mas2);
</script>
```

6
17

String methods : slice, substring, substr, replace

```
<script>
var str = "Apple, Banana, Grape";
var pos = str.slice(7,13);
document.write(pos);
</script>
```

var pos = str.slice(-13,-7); → Banana

```
<script>
var str = "Apple, Banana, Grape";
var pos = str.substring(7,13);
document.write(pos);
</script>
```

Similar to slice but cannot accept negative number → Banana

```
<script>
var str = "Apple, Banana, Grape";
var pos = str.substr(7,6);
document.write(pos);
</script>
```

→ Banana

```
<script>
var str = "Apple, Banana, Grape";
var pos = str.replace("Banana", "Lemon");
document.write(str);
document.write("<br>");
document.write(pos);
</script>
```

→ Apple, Banana, Grape
Apple, Lemon, Grape

String method : charAt

```
<script>
var str = "computer";
var mas = str.charAt(0);
var mas2 = str.charAt(1);
var mas3 = str.charAt(7);
document.write(mas + "<br>");
document.write(mas2 + "<br>");
document.write(mas3);
</script>
```

c
o
r

String method : charCodeAt

```
<script>
var str = "abcde";
var mas = str.charCodeAt(0); // change text to ascii character
var mas2 = str.charCodeAt(1);
var mas3 = str.charCodeAt(2);
var mas4 = str.charCodeAt(3);
var mas5 = str.charCodeAt(4);
document.write(mas + "<br>" + mas2 + "<br>" + mas3 + "<br>" + mas4 + "<br>" + mas5)
</script>
```

97
98
99
100
101

String method : search()

```
<script>
var str = "makan kue coklat kue";
var str2 = "cokl";
if (str.search(str2) == -1)
{       document.write("Not Found");        }
else
{       document.write("Found");    }
</script>
```

Found

String method : split()

```
<script>
var str = "makan kue coklat kue";
var mas = str.split(" ", 2); // split into array
        document.write(str + "<br>" + mas);
</script>
```

makan kue coklat kue
makan,kue

String methods : length, toString()

```
<script>
var str = "makan kue coklat kue";
var num = 123456;

var mas = str.length;
var mas2 = num.toString(); // convert number to string
var mas3 = mas2.length; // length of character

document.write(mas + "<br>");
document.write(mas3);
</script>
```

20
6

Number method : parseInt

```
<script>
var num = "12"; // string
var num2 = "23"; // string
var mas = parseInt(num); // convert string to number
var mas2 = parseInt(num2); // convert string to number
document.write(num + "+" + num2 + "=" + (mas+mas2));
</script>
```

Number method : toExponential

```
<script>
var num = 23.34563212323;
var mas = num.toExponential(6)*1; // 5 digit behind dot
var mas2 = num.toExponential(6);
var mas3 = num.toExponential();
document.write(mas + "<br>");
document.write(mas2  + "<br>");
document.write(mas3);
 </script>
```

```
23.34563
2.334563e+1
2.334563212323e+1
```

Number method : toFixed

```
<script>
var num = 23.34563;
var mas = num.toFixed();
var mas2 = num.toFixed(3);
var mas3 = num.toFixed(9);
document.write(mas + "<br>");
document.write(mas2 + "<br>");
document.write(mas3);
</script>
```

```
23
23.346
23.345630000
```

Number method : toPrecision

```
<script>
var num = 23.34563;
var mas = num.toPrecision();
var mas2 = num.toPrecision(2);
var mas3 = num.toPrecision(4);
var mas4 = num.toPrecision(9);
document.write(mas + "<br>");
document.write(mas2 + "<br>");
document.write(mas3 + "<br>");
document.write(mas4);
 </script>
```

```
23.34563
23
23.35
23.3456300
```

Number method : valueOf

```
<script>
var num = 23.34563;
var mas = num.valueOf();
var mas2 = num.valueOf(2);
var mas3 = num.valueOf(4);
var mas4 = num.valueOf(9);
document.write(mas + "<br>" + mas2 + "<br>" + mas3 + "<br>" + mas4);
</script>
```

```
23.34563
23.34563
23.34563
23.34563
```

Number method : toString

```
<script>
var num = 23.34563;
var mas = num.toString();
var mas2 = num.toString(2);
var mas3 = num.toString(4);
var mas4 = num.toString(9);
document.write(mas + "<br>" + mas2 + "<br>" +  mas3 + "<br>" + mas4);
</script>
```

```
23.34563
10111.010110000111101100110101001010101000010000111
113.11201323031102222010032
25.3088608515458315
```

Number methods : random, min, max, round, ceil, floor

```
<script>
var c = Math.random();
document.write(c);
document.write("<p>");
</script>
```

Hit f5 to see the changes
Random number from 0 - 1

```
<script>
var d = Math.min(1, 2, 3, 4, 5, 6);
var e = Math.max(1, 2, 3, 4, 5, 6);
document.write("min = " + d + " and max = " + e + "<p>");
</script>
```

min = 1 and max = 6

```
<script>
var xx = Math.round(3.8);
var tt = Math.round(3.6);
var kk = Math.round(3.5);
var yy = Math.round(3.4);
var zz = Math.round(3.2);
document.write(xx +" <br> "+ tt + "<br>" + kk + "<br>" + yy + "<br>" + zz);
</script>
```

Rounded to the nearest number

```
4
4
4
3
3
```

```
<script>
var ce = Math.ceil(3.2);
var fo = Math.floor(3.6);
document.write("ceil " +  ce + " and floor " + fo + "<p>") ;
</script>
```

Ceil rounded up
Floor rounded down

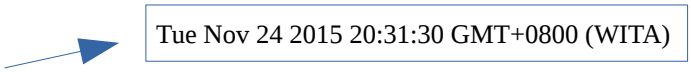
ceil 4 and floor 3

```
<script>
var fr = Math.floor(Math.random()*11);
document.write(fr);
</script>
```

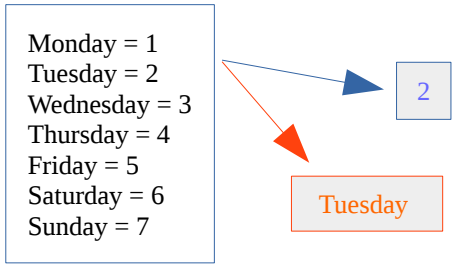
Hit f5 to see the changes
Random number from 0 - 10

Date method

```
<script>
var dt =  new Date();
document.write(dt);
</script>
```

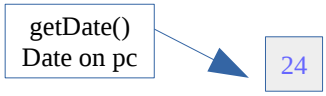



```
<script>
var dt =  new Date();
var yu = dt.getDay();
document.write(yu);
</script>
```

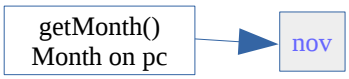



```
<script>
var dt =  new Date();
var yz = ["sunday", "monday", "tuesday", "wednesday", "thursday", "friday", "saturday"];
var er = yz[dt.getDay()];
document.write(er);
</script>
```

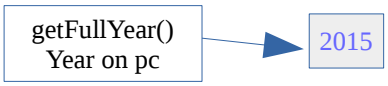
```
<script>
var dt =  new Date();
var da = dt.getDate();
document.write(da);
</script>
```




```
<script>
var dt =  new Date();
var mo = ["jan", "feb", "mar", "apr", "mei", "jun", "jul", "ags", "sep", "okt", "nov", "des"];
var mon = mo[dt.getMonth()];
document.write(mon);
</script>
```

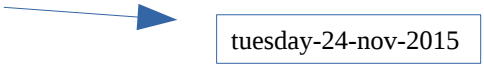



```
<script>
var dt =  new Date();
var th = dt.getFullYear();
document.write(th);
</script>
```



Date method complete

```
<script>
var dt =  new Date();

var yz = ["sunday", "monday", "tuesday", "wednesday", "thursday", "friday", "saturday"];
var yzx = yz[dt.getDay()];

var da = dt.getDate();

var mo = ["jan", "feb", "mar", "apr", "mei", "jun", "jul", "ags", "sep", "okt", "nov", "des"];
var mon = mo[dt.getMonth()];

var th = dt.getFullYear();

document.write(yzx + "-" + da + "-" + mon + "-" + th);

</script>
```



Insert image

index.html

```
<!DOCTYPE html>
<html lang="en">
<head><title>HOME</title></head>
<meta charset="UTF-8">
<body>
<div id="simage1"></div>
<div id="simage2"></div>
<div id="simage3"></div>
<script src = "script.js"></script>
<script>
	var m = document.getElementById("simage1");
	var n = document.getElementById("simage2");
	var o = document.getElementById("simage3");
	insert("browser.png","relative","300px","200px",m);
	insert("torso.png","relative","100px","400px",n);
	insert("head.png","relative","200px","10px",o);
</script>
</body>
</html>
```

Insert more than one image

script.js

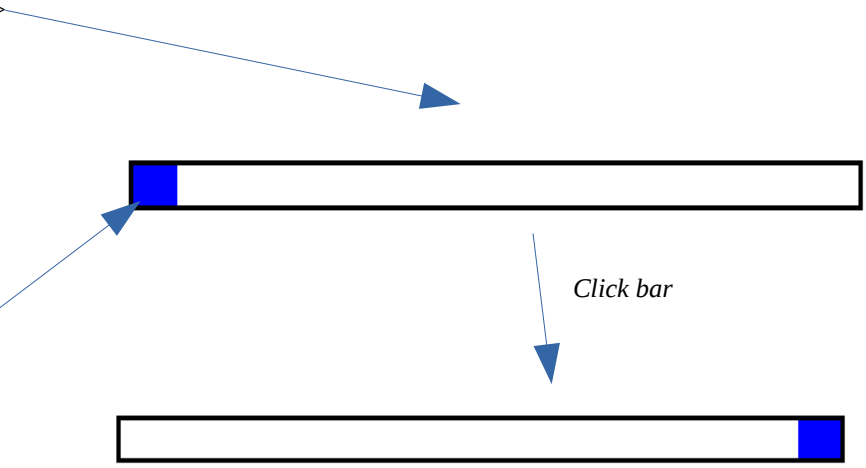
```
	var insert = function(imgName, imgPos, imgLeft, imgTop, imgDiv)
	{
		var  img = new Image();
		img.src = imgName;
		imgDiv.style.position=imgPos;
		imgDiv.style.left=imgLeft;
		imgDiv.style.top=imgTop;
		img.onload = function()
		{	imgDiv.appendChild(img);	}
	}
```

Change CSS style

```
<!DOCTYPE html>
<html lang="en">
<head><title>HOME</title>
<meta charset="UTF-8">
        <style type = "text/css">
                p {
                margin : 20px 0px 0px 20px;
                padding : 5px 0px 0px 0px;
                text-align : center;
                width : 200px;
                height : 25px;
                color : black;
                font : 15px arial;
                text-shadow : 1px 1px 1px grey;
                letter-spacing : 2px;
                font-weight : bold;
                }
        </style>
</head>
<body>
<p id="text" onmouseover="applyOver()" onmouseout="applyOut()">Apply</p>
<script>
var applyOver = function()
{
        var take = document.getElementById("text");
        take.style.border = "3px solid #3300CC";
        take.style.color = "DarkBlue";
        take.style.borderRadius = "10px";
        take.style.boxShadow = "1px 1px 5px 2px #d5d5e0";
        take.style.backgroundColor = "LightCyan";
        take.style.transitionDuration = "1s";
        take.innerHTML = "Click to Apply";
        take.style.cursor = "pointer";
}

var applyOut = function()
{
        var take = document.getElementById("text");
        take.style.border = "0px";
        take.style.color = "black";
        take.style.borderRadius = "0px";
        take.style.boxShadow = "0px 0px 0px transparent";
        take.style.backgroundColor = "transparent";
        take.innerHTML = "Apply ";
}
</script>
</body>
</html>
```

Animation 1 (Progress Bar)

```
<!DOCTYPE html>
<html lang="en">
<head><title>HOME</title>
<meta charset="UTF-8">
<style type="text/css">
#path {
position:relative;
overflow:hidden;
width:500px;
height:30px;
border:3px solid #000;
box-sizing : border-box;
}

#block {
position:absolute;
background:blue;
width:30px;
height:30px;
padding-top:5px;
}
</style>
</head>

<body>
<div onclick="move()" id="path">
        <div id="block"></div>
</div>

<script>
function move()
{
   var left = 0 ;
   function frame()
        {
          var abu = document.getElementById("block");
          left ++;
          abu.style.left = left; // show frame
          if (left == 465)  // check finish condition → see width path
             clearInterval(id);
        }
          var id = setInterval(frame, 5); // draw every 5ms → 50 frames / second
}
</script>
</body>
</html>
```

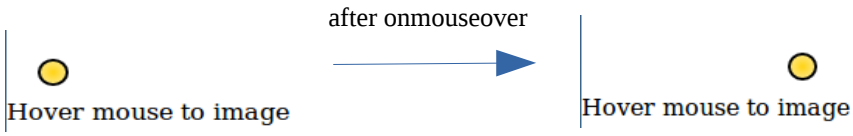


Animation 2 (Progress Bar)

```
<!DOCTYPE html>
<html lang="en">
<head><title>HOME</title>
<meta charset="UTF-8">
<style type="text/css">
#path {
position:relative;
overflow:hidden;
width:500px;
height:30px;
border:3px solid #000;
box-sizing : border-box;
}

#block {
position:absolute;
background:yellow;
width:30px;
height:30px;
padding-top:5px;
}
</style>
</head>

<body>
<div onclick="move()" id="path">
        <div id="block"></div>
</div>
<script>
function move()
{
  var width = 30 ;
   function frame()
        {
          var abu = document.getElementById("block");
              width ++;
              abu.style.width = width;
              if (width == 100)
                {     abu.style.backgroundColor ="lime";          }
              if (width == 250)
                {     abu.style.backgroundColor ="orange";        }
              if (width == 400)
                {     abu.style.backgroundColor = "red";          }
             if (width == 494)  // check finish condition → see width path
              clearInterval(id);
        }
          var id = setInterval(frame, 10); // draw every 10ms          → 100 frames / second
}
</script>
</body>
</html>
```

Animation 1 (Image)

```
<!DOCTYPE html>
<html lang="en">
<head><title>HOME</title>
<meta charset="UTF-8">
</head>

<body>
<form>
	<img id="myImage" src="browser.png" onmouseover="moveRight();">
	<p>Hover mouse to image</p>
</form>

<script>
	var ball = null;
	function init()
	{
		ball = document.getElementById('myImage');
		ball.style.position='relative';
		ball.style.left='0px';
	}

	function moveRight()
	{	ball.style.left = parseInt(ball.style.left)+20+'px';	}

	window.onload=init;
</script>
</body>
</html>
```



Animation 2 (Image)

```
<!DOCTYPE html>
<html lang="en">
<head><title>HOME</title>
<meta charset="UTF-8">
</head>

<body>
<form>
	<img id="myImage" src="browser.png" onmouseover="moveRight();">
	<p>Hover mouse to image</p>
	<p onclick="stop();" style="cursor:pointer;">click to stop</p>
</form>


<script>
	var ball = null;
	var animate;
	function init()
	{
		ball = document.getElementById('myImage');
		ball.style.position='relative';
		ball.style.left='0px';
	}

	function moveRight()
	{
		ball.style.left = parseInt(ball.style.left)+20+'px';
		animate = setTimeout(moveRight,20); //call moveRight in 20msec
	}

	function stop()
	{	clearTimeout(animate);	}

	window.onload=init;
</script>
</body>
</html>
```