

## JavaScript part 2

A scripting language based on  
objects

### JavaScript - relational expressions

```
==, !=, <, >, <=, >=
a==b;
a!=b;
a<b;
a<=b;
a>b;
a>=b
```

If one is a string and one is a number it attempts to convert the string to a number

If one is Boolean and the other is not, the Boolean operand is coerced to a number (1 or 0)

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### JavaScript - control structures

```
if (condition)
{ statement(s) A};
```

```
if (condition)
{ statement(s) A}
else
{statement(s) B};
```

2010\_If\_Example.htm

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### JavaScript - control structures

```
var d = new Date();
var time = d.getHours();
if (time < 10)
{document.write("<b>Good morning</b>");};
```

```
var d = new Date();
var time = d.getHours();
if (time < 10)
{document.write("Good morning!");}
else
{document.write("Good day!");};
```

2010\_If\_Example.htm

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## JavaScript - control structures

```
switch(n)
{case 1: execute code block 1
break;
case 2: execute code block 2
break;
default:
code to be executed if n is different from case 1 and 2
}
```

*n* is evaluated once. The value of the expression is then compared with the values for each case in the structure. If there is a match, the block of code associated with that case is executed. Use **break** to prevent the code from running into the next case automatically.

2010\_Borders.htm, 2010\_Borders\_Js.js

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## JavaScript - control structures

In JavaScript, there are two different kind of loops: **for** loop and **while** loop

**for**  
loops through a block of code a specified number of times

```
for(var =startvalue;var<=endvalue;var=var+increment)
{body of the for loop};
```

```
var i=0;
for (i=0;i<=5;i++)
{ window.document.write("The number is " + i);
window.document.write("<br />");};
```

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## JavaScript - control structures

**while**  
loops through a block of code while a specified condition is true

```
while(var<=endvalue)
{body of the while loop};
```

```
var i=0;
while (i<=5)
{ window.document.write("The number is " + i);
window.document.write("<br />");
i=i+1;};
```

2010\_Loops.html

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## Strings to Numbers

If you prompt the user for a number, using the prompt function, or a text box, what you actually get is a string that contains the "number" as a string of digits (and a decimal point).

Hence, before you can use the number for calculations you must convert it to a real number.

To convert a string to a real number, you may use **parseInt()** or **parseFloat()** functions.

**parseInt()** returns an integer and **parseFloat()** returns a float (i. e. a decimal) number.

```
var i="123.4";
j=i;// ?
k= parseFloat(i);
j= parseInt(i); //?
```

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