



THIRUTHANGAL NADAR COLLEGE

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Selavayal, Chennai-51.

A Self-Financing Co-educational College of Arts & Science

Affiliated to the University of Madras

Accredited with 'B' Grade by NAAC

An ISO 9001: 2015 Certified Institution

NAME OF THE DEPARTMENT: BCA(SHIFT-I)

SUBJECT :WEB TECHNOLOGY

TOPIC : JAVA SCRIPT

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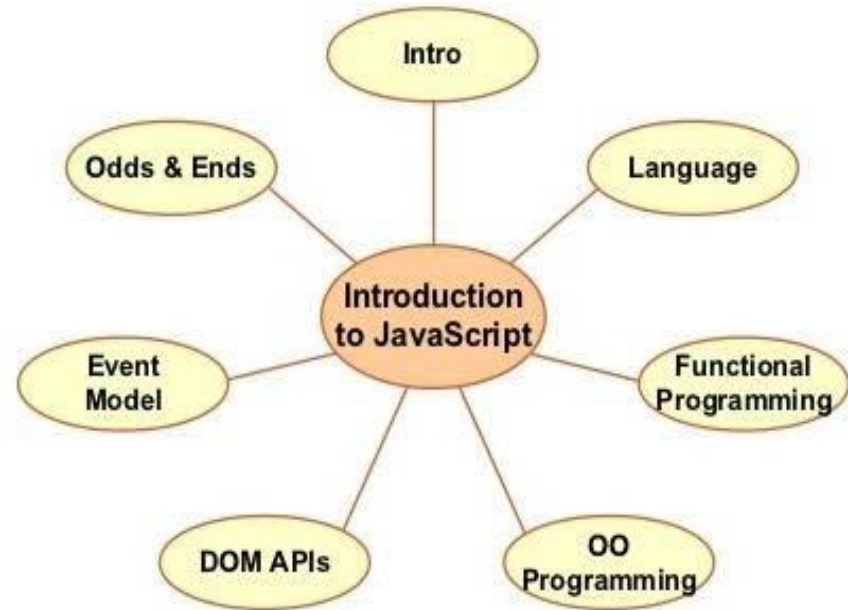
- Introduction to JavaScript
- Advantage of JavaScript
- JavaScript Syntax
- Data type
- Variable
- Array
- Operator and Expression
- Looping Constructor
- Function
- Dialog box.

Introduction to JavaScript

- JavaScript was developed by Brendan Eich in 1995, which appeared in Netscape, a popular browser of that time.
- JavaScript is a very powerful **client-side scripting language**.
- you can make your **webpage more lively and interactive**, with the help of JavaScript.



Brendan Eich -
Creator of JavaScript



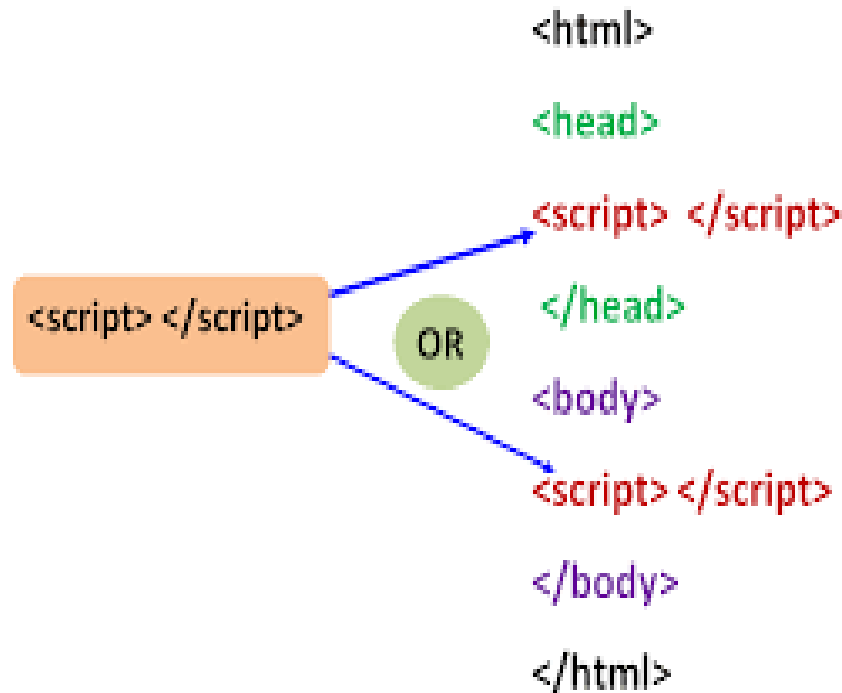
Advantages of JavaScript

- **Less server interaction** – validate user input before sending the page
- **Immediate feedback to the visitors** – no need to wait
- **Increased interactivity** – work with mouse as well as keyboard
- **Richer interfaces** – include drag-and-drop components and sliders

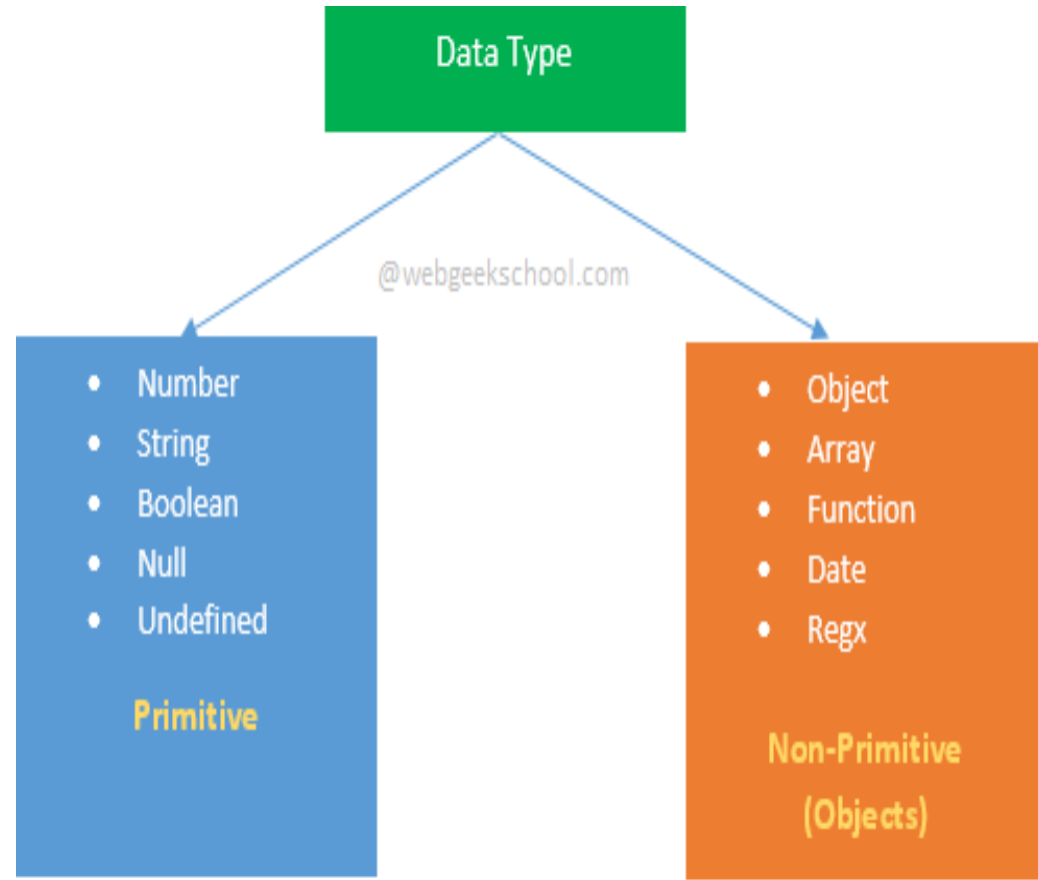
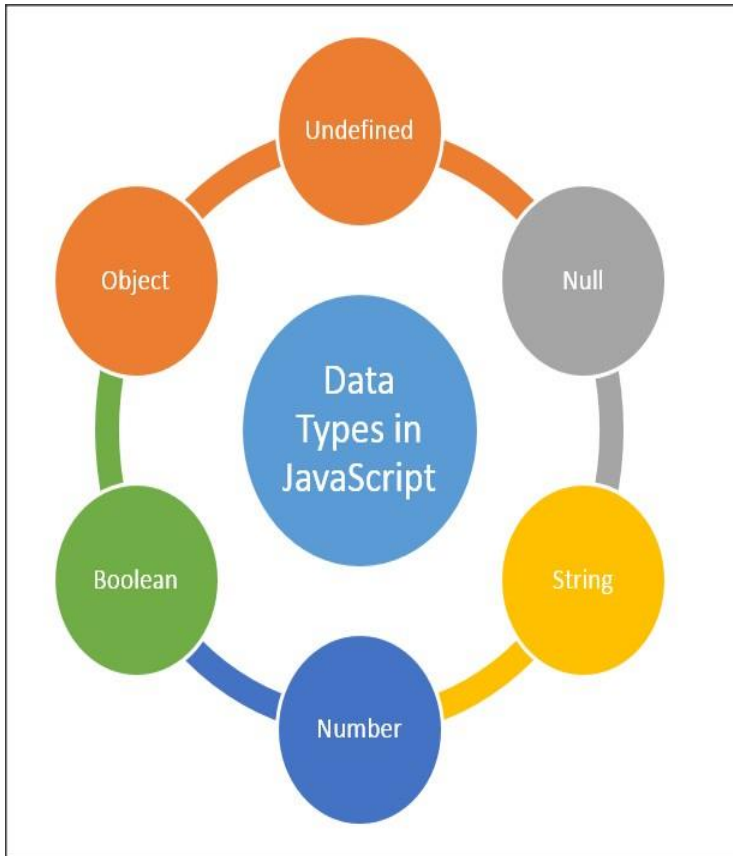


JavaScript Syntax

- JavaScript can be implemented using JavaScript statements that are placed within the **<script>... </script>**.
- **<script language="javascript" type="text/javascript">**
JavaScript code
- **</script>**

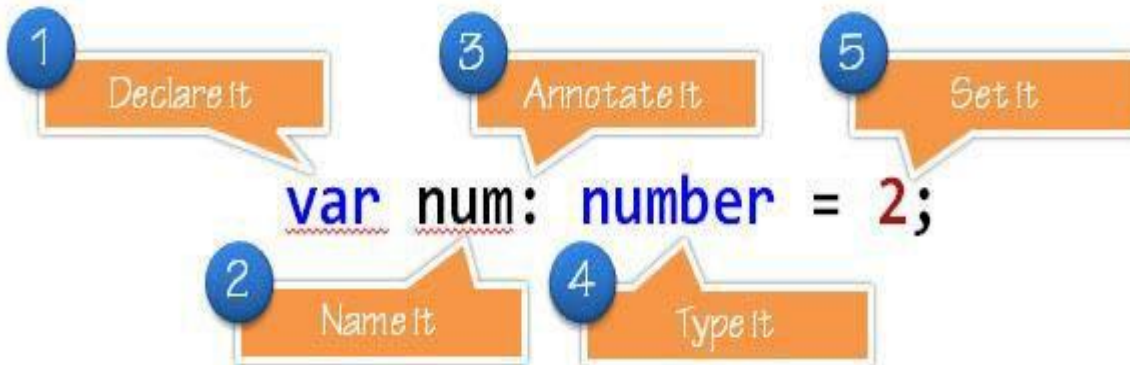
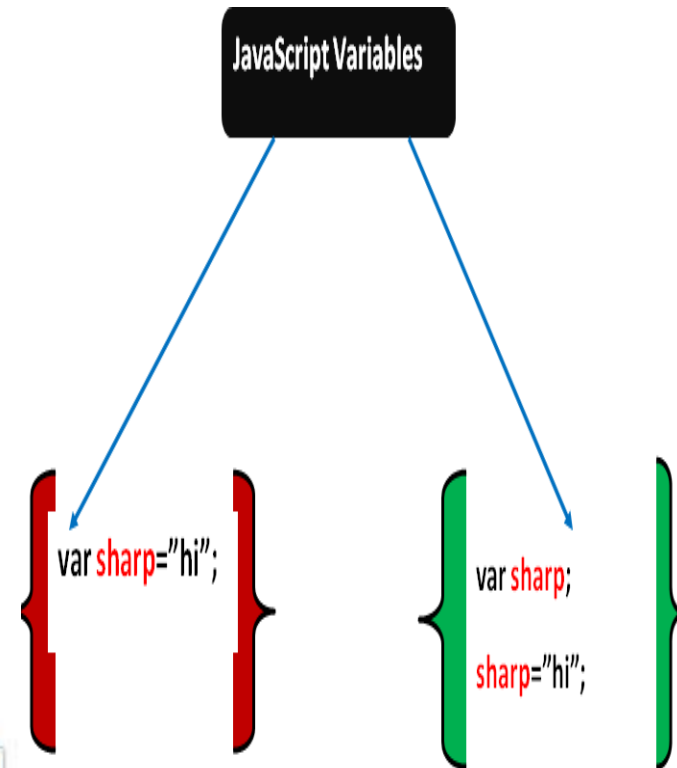
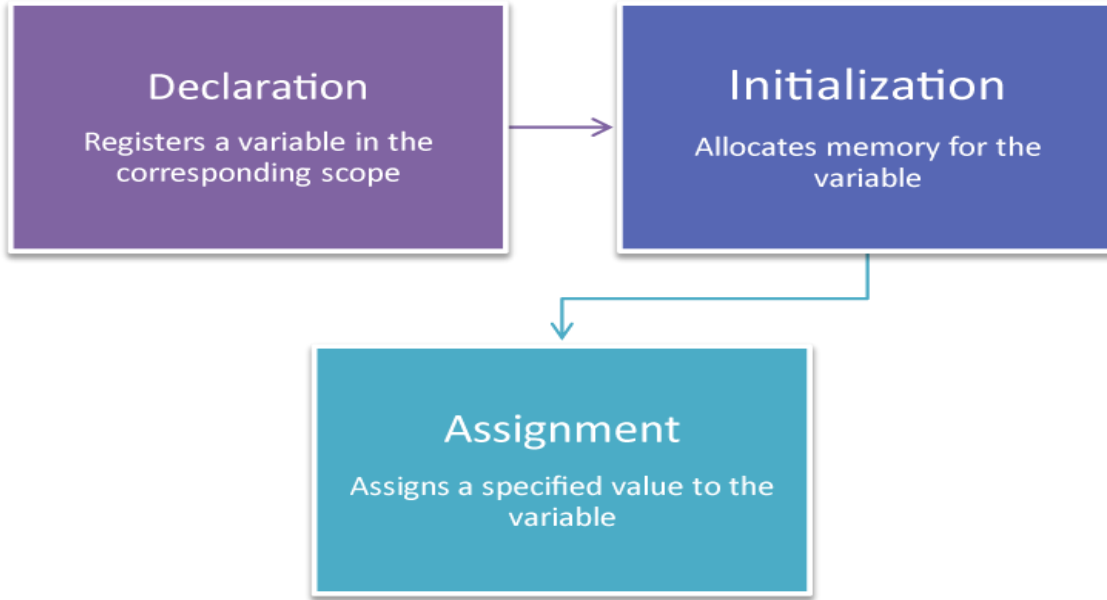


Data types



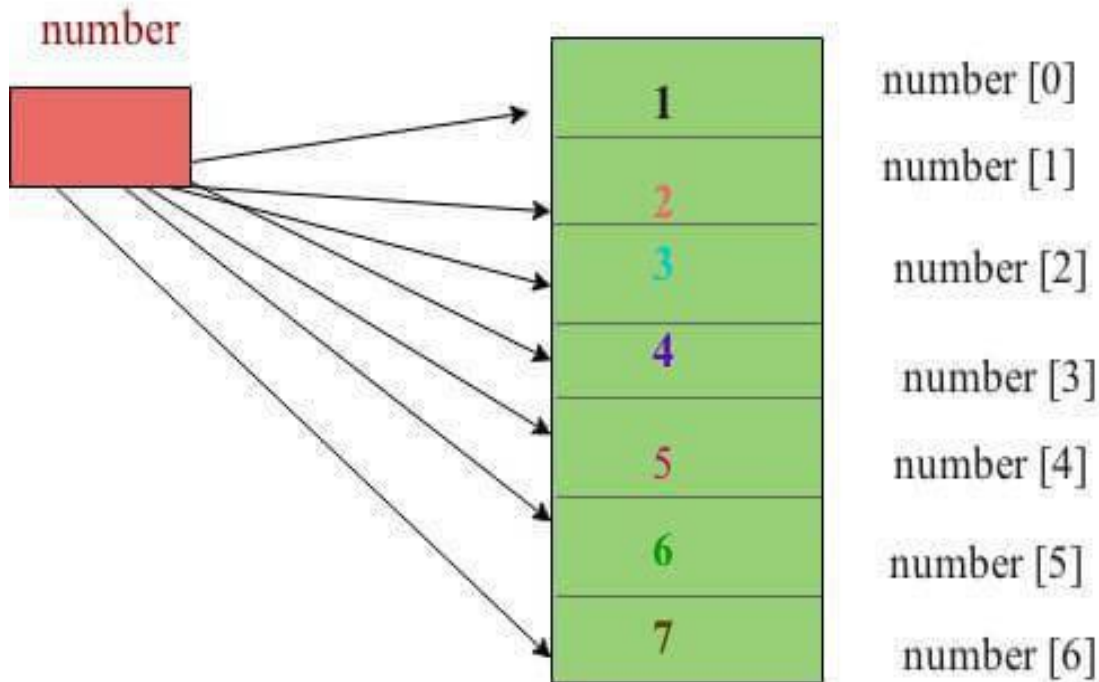
JavaScript Data Type

Variables



Array

What is an Array ?



How Array Stores

Lets say there are 10 elements

Element 1 = Array [0]

Element 2 = Array [1]

Element 3 = Array [2]

⋮

Element 10 = Array [9]

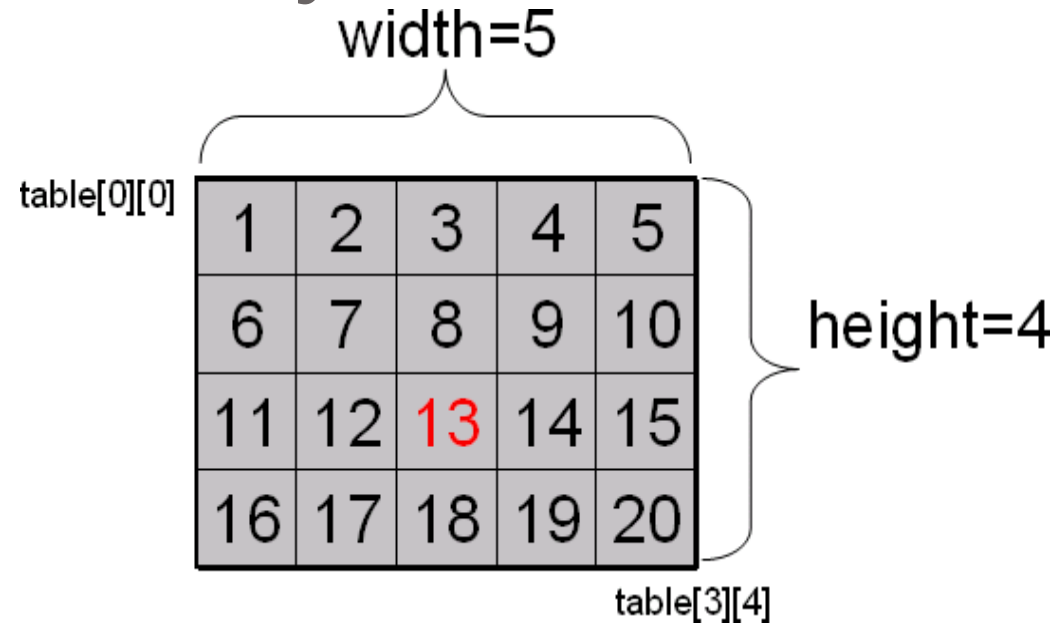
Array is container object that holds a number of elements in a single type

Array indices or count start with 0. i.e array[0]

Multi-dimensional Array

Array Methods

- Concat
- Join
- Push
- Pop
- UnShift
- Shift
- Sort
- Slice
- Splice



	maker	model	color
0	Gibson	Les Paul	Sunburst
1	Fender	Stratocaster	Black
2	Martin	D-28	Mahogany
3	Takamine	EG330SC	Spruce

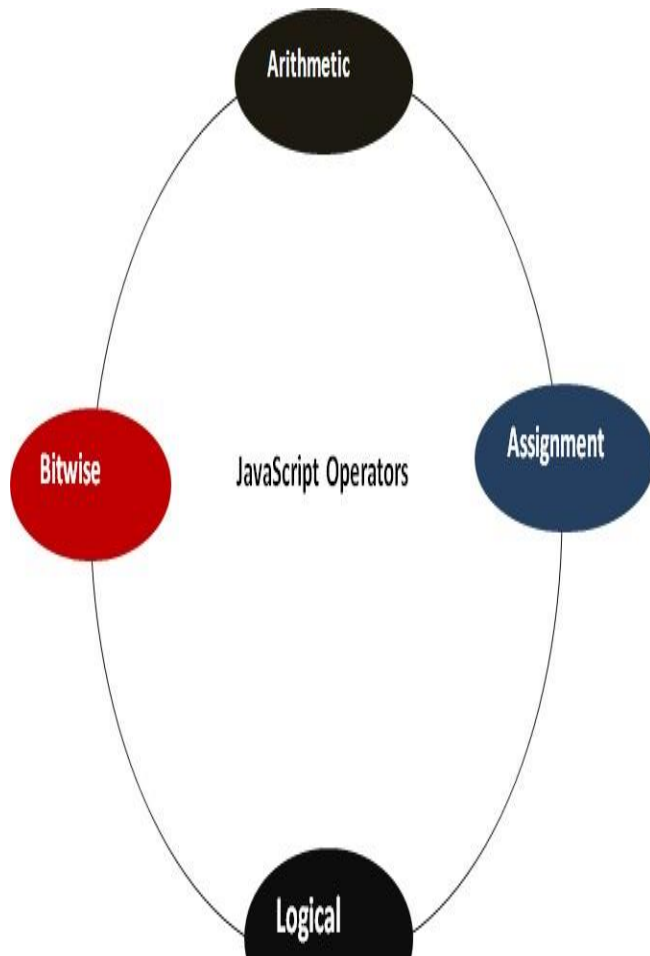
← Name of the parameters

← Data

↑ Index number (objects created as arrays)

Comparison of a multidimensional array to a column of data

Operators



Category	Operator	Name/Description	
Arithmetic	+	Addition	
	-	Subtraction	
	*	Multiplication	
	/	Division	
	%	Modulus	
	++		Increment and then return value
			Return value and then increment
--		Decrement and then return value	
		Return value and then decrement	
Logical	&&	Logical “and” evaluates to true when both operands are true	
		Logical “or” evaluates to true when either operand is true	
	!	Logical “not” evaluates to true if the operand is false	
Comparison	==	Equal	
	!=	Not equal	
	<	Less than	
	<=	Less than or equal	
	>	Greater than	
	>=	Greater than or equal	
String	+	Concatenation(join two strings together)	

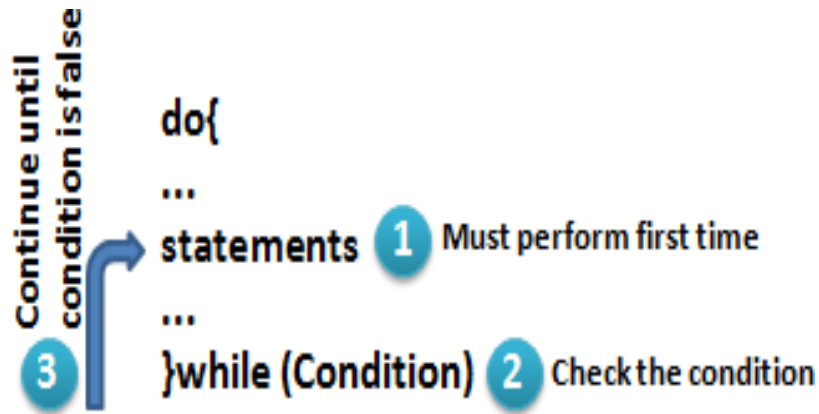
Expressions

- An **expression** is any valid set of variables, literals, operators, and other expressions that evaluates to a single value.

Symbol	Usage	Shorthand
$+=$	$x=x+y$	$x+=y$
$-=$	$x=x-y$	$x-=y$
$*=$	$x=x*y$	$x*=y$
$/=$	$x=x/y$	$x/=y$
$\%=$	$x=x\%y$	$x\%=y$

Looping Constructor

While



For

JavaScript

```

for ( i = 0; i < 10; i++ )
{
  console.log(i);
}

// this will print the
  numbers from 0 through 9

```

JavaScript

```

var n = 0;
while (n < 3) {
  console.log("Looping.");
  n++;
}

Looping.
Looping.
Looping.

```

JavaScript If...Else Statements

Conditional Statements

Very often when you write code, you want to perform different actions for different decisions.

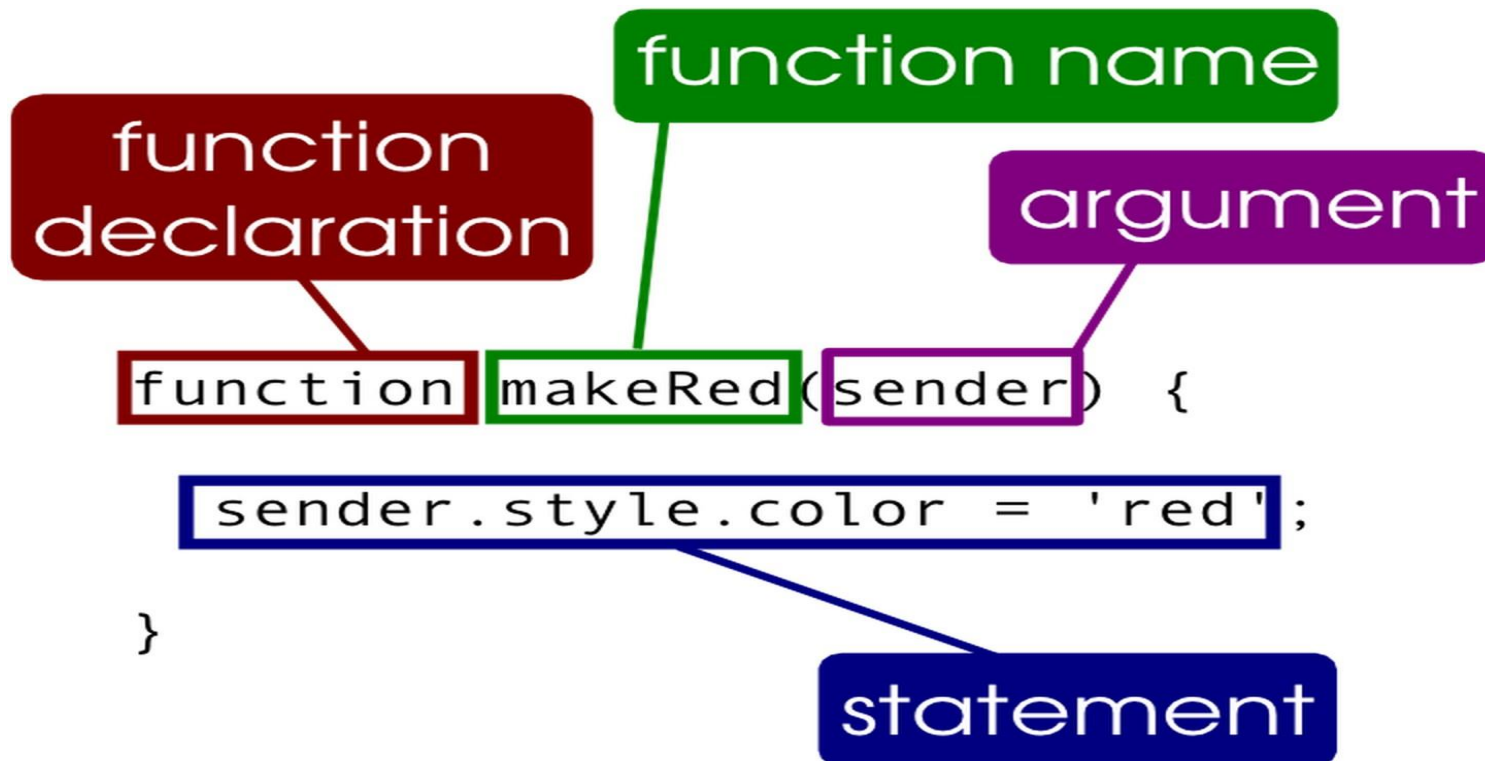
You can use conditional statements in your code to do this.

1. In JavaScript we have the following conditional statements:
2. Use **if** to specify a block of code to be executed, if a specified condition is true
3. Use **else** to specify a block of code to be executed, if the same condition is false
4. Use **else if** to specify a new condition to test, if the first condition is false
5. Use **switch** to specify many alternative blocks of code to be executed

Reference: <https://www.slideshare.net/martyhall/javascript-and-jquery-programming-tutorial-basic-syntax-part-1-conditionals-loops-math-class-embedding-javascript-in-html>

Function

A function is a **group of reusable code** which can be called anywhere in your program. This eliminates the need of writing the **same code again and again**.

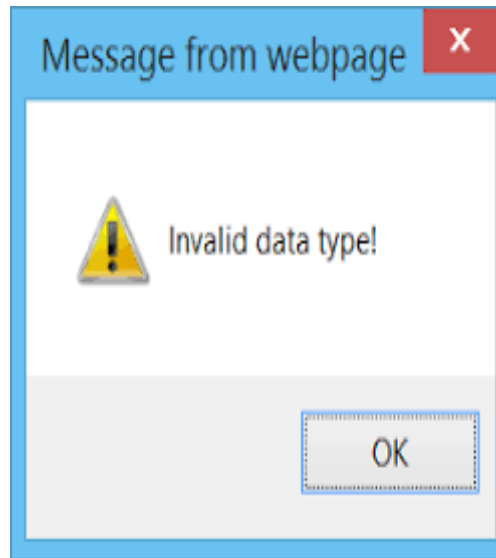


Dialog box.

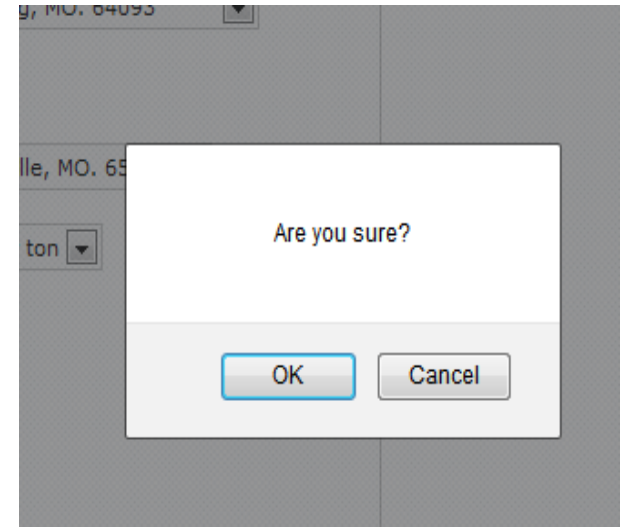
These dialog boxes can be used to raise and alert, or to get confirmation on any input or to have a kind of input from the users.



PROMPT BOX



ALERTBOX



CONFIRM BOX