This small example illustrates that a JavaScript program can do *within the browser* essentially anything any other application does, and sometimes in only a few lines of source code.

**Testing Java Script**

<!doctype html>

<html>

<head>

<title>In-browser calculator</title>

</head>

</body>

<h1>In-browser calculator</h1>

<form name="calculator">

<table border=4>

<tr>

<td>

<input type="text" name="Input" Size="20">

<br>

</td>

</tr>

<tr>

<td>

<input type="button" name="one" value=" 1 "

OnClick="calculator.Input.value

+= '1'">

<input type="button" name="two" value=" 2 "

OnCLick="calculator.Input.value

+= '2'">

<input type="button" name="three" value=" 3 "

OnClick="calculator.Input.value

+= '3'">

<input type="button" name="plus" value=" + "

OnClick="calculator.Input.value

+= ' + '">

<br>

<input type="button" name="four" value=" 4 "

OnClick="calculator.Input.value

+= '4'">

<input type="button" name="five" value=" 5 "

OnCLick="calculator.Input.value

+= '5'">

<input type="button" name="six" value=" 6 "

OnClick="calculator.Input.value

+= '6'">

<input type="button" name="minus" value=" - "

OnClick="calculator.Input.value

+= ' - '">

<br>

<input type="button" name="seven" value=" 7 "

OnClick="calculator.Input.value

+= '7'">

<input type="button" name="eight" value=" 8 "

OnCLick="calculator.Input.value

+= '8'">

<input type="button" name="nine" value=" 9 "

OnClick="calculator.Input.value

+= '9'">

<input type="button" name="times" value=" x "

OnClick="calculator.Input.value

+= ' \* '">

<br>

<input type="button" name="clear" value=" c "

OnClick="calculator.Input.value

= ''">

<input type="button" name="zero" value=" 0 "

OnClick="calculator.Input.value

+= '0'">

<input type="button" name="DoIt" value=" = "

OnClick="calculator.Input.value

= eval(calculator.Input.value)">

<input type="button" name="div" value=" / "

OnClick="calculator.Input.value

+= ' / '">

</td>

</tr>

</table>

</form>

</body>

</html>

To create a simple JavaScript program, perform the following steps using an editing or app development tool, create a file with the following content:

<!doctype html>

<html>

<head>

<title>My first JavaScript program</title>

</head>

<body>

<h1>My first JavaScript program</h1>

<p>This is text.

<button type = 'button' onclick = "alert('You clicked the

button');">I'm a button; click me</button>

</body>

</html>

**Example 1**

<html>

<head>

<script language="javascript">

function show\_alert()

{

alert("Hi! This is alert box!!")

}

</script>

</head>

<body>

<input type="button" onclick="show\_alert()" value="Show alert box" />

</body>

</html>

**Example 2**

<html>

<head>

<script language="javascript">

function disp\_alert()

{

alert("Hello again! This is how we" + '\n' + "add line breaks to an alert box!")

}

</script>

</head>

<body>

<input type="button" onclick="disp\_alert()" value="Display alert box" />

</body>

</html>

**Example 3**

<html>

<head>

<script language="javascript">

function disp\_confirm()

{

var r=confirm("Press a button")

if (r==true)

{

document.write("You pressed OK!")

}

else

{

document.write("You pressed Cancel!")

}

}

</script>

</head>

<body>

<MARQUEE LOOP = INFINITE> Hey this is really cool </MARQUEE>

<input type="button" onclick="disp\_confirm()" value="Display a confirm box" />

</body>

</html>

**Example 4**

<HTML>

<HEAD>

<TITLE>Alert Box</TITLE>

<SCRIPT LANGUAGE="JavaScript">

<!—

var name = prmpt("Please Enter your name:", "APP4050")

alert("Hello " + name)

// —>

</SCRIPT>

</HEAD>

<BODY>

</BODY>

</HTML>

**Example 5**

<html>

<head>

<title> ----- 1 - HelloWorld ------- </title>

<SCRIPT TYPE="text/javascript" >

<!--

var price;

var quantity;

var total;

price = prompt("Enter the price:","10.00");

quantity = prompt("How many: ","1");

total = price \* quantity;

alert("The total is "+total);

//-->

</SCRIPT>

</head>

<body>

<p> APP4050 </p>

</body>

</html>

**Example 6**

<HTML>

<HEAD>

<TITLE> A demonstration of JavaScript operators</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

var y = 5;

var x= y + 1;

document.write("x = y + 1 ...Result = " + x);

x += y;

document.write("<BR>x += y ...Result = " + x);

x -= y;

document.write("<BR>x -= y ...Result = " + x);

x \*= y;

document.write("<BR>x \*= y ...Result = " + x);

x /= y;

document.write("<BR>x /= y ...Result = " + x);

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 7**

<HTML>

<HEAD>

<TITLE>Substring Method Example</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

var cust1Info = "Mwangi Kayole Behind Paradise Pab";

var cust2Info = "Nasike Kwangware Muiguithania lane";

var cust3Info = "Makwere Mukuru Kiayaba adjacent to railwayline";

document.write(cust1Info.substring(0,14),"<BR>");

document.write(cust2Info.substring(0,40),"<BR>");

document.write(cust3Info.substring(0,26),"<BR>");

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 8**

<HTML>

<HEAD>

<TITLE> Demonstration of if statements</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

var accountStatus = open; //assume all accounts are open by default

//Prompt the user for an account name

var accountName = window.prompt("Enter your account name:");

//Test whether the supplied account name equals APP4050

if (accountName == "APP4050")

document.write("The account number for this account is 12321. <BR>");

//Set accountStatus equal to warning if the account name equals APP4030

if (accountName == "APP4030") {

document.write("The account number for this account is 88844. <BR>");

accountStatus = "warning";

}

//Display one of two messages based on the value of accountStatus

if (accountStatus != "warning") {

document.write("You may accept new registration for this Student.");

}

else {

document.write("Do not accept new registration for this Student.");

}

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 13**

<HTML>

<HEAD>

<TITLE> Demonstration of the switch statement</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

var accountStatus = "None";

var accountName = window.prompt("Enter your account name:");

switch (accountName)

{

case "APP4050":

document.write("The account number for this account is 12321.");

accountStatus = "approved";

break;

case "APP4030":

document.write("The account number for this account is 88844.");

accountStatus = "warning";

break;

default:

document.write("The account is not registered in this system.");

accountStatus = "error";

}

if (accountStatus == "warning") {

document.write(accountStatus);

window.alert("Contact the Associate DVC Academic affairs");

}

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 14**

<HTML>

<HEAD>

<TITLE>Demonstration of the do...while statement</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

var counter = 10;

document.write("<B>Watch me count backwards!</B><BR>");

do {

counter;

document.write("counter = ", counter , "<BR>");

} while (counter > 0)

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 15**

<HTML>

<HEAD>

<TITLE> Sample Array</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

Auto = new Array(10);

Auto[0]="98 Ford Escort";

Auto[1]="97 Ford Cortina";

Auto[2]="85 Suzuki Baleno";

Auto[3]="96 Suzuki Cultus";

Auto[4]="90 Honda Civic";

Auto[5]="97 Honda CRV";

Auto[6]="96 Toyota Corsa";

Auto[7]="98 Toyota Corolla";

Auto[8]="92 Mitsubishi Pajero";

Auto[9]="95 Honda Civic Hatchback";

document.write("The first element in the array is a <B>", Auto[0], "</B>");

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Note:**

The first array element, Auto[0], will be displayed. The rest have to be called.

**Example 16**

**Looping through an Array**

<HTML>

<HEAD>

<TITLE>Looping through an Array</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

Auto = new Array(10);

Auto[0]="98 Ford Explorer";

Auto[1]="97 Ford Explorer";

Auto[2]="85 Plymouth Mustang";

Auto[3]="96 Plymouth Voyager";

Auto[4]="90 Honda Civic";

Auto[5]="97 Honda Civic";

Auto[6]="96 Plymouth Neon";

Auto[7]="98 Plymouth Neon";

Auto[8]="92 Ford Explorer Wagon";

Auto[9]="95 Honda Civic Hatchback";

array\_length = Auto.length;

document.write("<B>Current Inventory Listing</B><BR>");

for (var i = 0; i < array\_length; i++) {

document.write(Auto[i], "<BR>");

}

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 17**

**A Dense Array**

<HTML>

<HEAD>

<TITLE> A Dense Array</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

Animals = new Array("mice", "dog", "cat", "hamster", "fish");

array\_length = Animals.length;

document.write("<B>List of animals in the Zoo</B><BR>");

for (var i = 0; i < array\_length; i++) {

document.write(Animals[i], "<BR>");

}

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 18**

**Sorting an Array**

<HTML>

<HEAD>

<TITLE> Sorting an Array</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

Animals = new Array("mice", "dog", "cat", "hamster", "fish");

document.write("<B>List of animals in the Zoo</B><BR>");

document.write(Animals.sort());

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 19**

**Building a dynamic Array**

<HTML>

<HEAD>

<TITLE> Building a dynamic Array</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!-- Start hiding JavaScript statements

document.write("What are your 3 most favourite things? <BR>");

Number\_Array = new Array(3);

for (var i = 0; i < 3; i++) {

var your\_number = prompt('I like: ', ' ');

Number\_Array[i] = your\_number;

document.write(Number\_Array[i], "<BR>");

}

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 20**

**Creating a Multi-Dimensional Array**

<HTML>

<HEAD>

<TITLE> Creating a Multi-Dimensional Array</TITLE>

</HEAD>

<BODY>

<SCRIPT LANGUAGE="JavaScript" TYPE="Text/JavaScript">

<!--Start hiding JavaScript statements

//Part 1 - Prompt user for array size

array\_size = window.prompt("How many cars do you plan to list?","");

MyArray = new Array(array\_size);

//Part 2 - Populate the arrary with user supplied information

for (row=0; row < array\_size; row++) {

MyArray[row] = new Array(3);

MyArray[row][0] = window.prompt("Type of car?","");

MyArray[row][1] = window.prompt("Color of car?","");

MyArray[row][2] = window.prompt("Sale price?","");

}

//Part 3 - Display the contents of the array

for (row=0; row < array\_size; row++) {

for (column=0; column < 3; column++) {

document.write(MyArray[row][column] + " ");

}

document.write("<BR>");

}

// End hiding JavaScript statements -->

</SCRIPT>

</BODY>

</HTML>

**Example 21**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var totalDistance=0, fare=0;

while(totalDistance<=10)

{

fare=fare+5;

totalDistance=totalDistance+2;

document.write("fare: Shillings."+fare+"<br/>"); }

document.write("Thank You!");

</script>

</body>

</html>

**Example 22**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var totalDistance=10, fare=0;

do

{

fare=fare+5;

totalDistance=totalDistance+2;

document.write("fare: Rs."+fare+"<br/>"); }

while(totalDistance<=10);

document.write("Thank You!");

</script>

</body>

</html>

**Example 23**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var Number;

document.write("Even numbers from 0 to 10 <br/>");

for(Number=0;Number<=10;Number=Number+2)

{

document.write(Number+"<br/>");

}

document.write("Thank You!");

</script>

</body>

</html>

**Example 24**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var count=0;

while(count<10)

{

++count;

if((count%2==0))

break;

else

document.write("count="+count+"<br/>");

}

document.write("while loop exited");

</script>

</body>

</html>

**Example 25**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var count=0;

while(count<10)

{

++count;

if(count%2==0)

continue;

else

document.write("count="+count+"<br/>");

}

document.write("while loop exited");

</script>

</body>

</html>

**Example 26**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

function calculateAverage()

{

var a=15, b=25; c=35;

var average= (a+b+c)/3;

document.write("Average = "+average);

}

document.write("The calculateAverage() function is to be called...<br/>");

calculateAverage();

</script>

</body>

</html>

**Example 27**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

alert( "Hello World" );

</script>

</body>

</html>

**Example 28**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var qry= confirm ( "Are you sure to send this file to Recycle Bin ? " );

if (qry)

document.write ("The file is deleted");

else

document.write ("Welcome to JavaScript");

</script>

</body>

</html>

**Example 29**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var name= prompt( "Please enter your name: " );

if (name==null || name=="") name = " visitor ";

{

document.write ("Hi " + name + ", Welcome to JavaScript");

}

</script>

</body>

</html>

**Example 30**

<html>

<head>

<title>JavaScriptExample</title>

</head>

<body bgcolor="pink">

<script type="text/javascript" language="javascript">

var x=25;

var y=10;

document.write (eval(x-y));

document.write ("<br>");

document.write (eval ("9\*5"));

document.write ("<br>");

var a = 15;

document.write (eval (a/3));

</script>

</body>

</html>