Introduction to JavaScript

Window Object

The window object represents an open window in a browser

Some common Window Object Methods:

Method	Description
alert()	Displays an alert box with a message and an OK button
confirm()	Displays a dialog box with a message and an OK and a Cancel button
print()	Prints the content of the current window
prompt()	Displays a dialog box that prompts the visitor for input

Document Object

The document object is the root node of the HTML document and the "owner" of all other nodes like element nodes, text nodes, attribute nodes, and comment nodes.

Some common Document Object Properties and Methods:

Property / Method	Description
document.body	Sets or returns the document's body (the <body> element)
document.getElementById()	Returns the element that has the ID attribute with the specified value
document.getElementsByClassName()	Returns a NodeList containing all elements with the specified class name
document.getElementsByName()	Returns a NodeList containing all elements with a specified name
document.getElementsByTagName()	Returns a NodeList containing all elements with the specified tag name
document.write()	Writes HTML expressions or JavaScript code to a document

HTML Events

HTML events are "things" that happen to HTML elements.
When JavaScript is used in HTML pages, JavaScript can "react" on these events.

Come common HTML events:

Event	Description
onchange	An HTML element has been changed
onclick	The user clicks an HTML element
onmouseover	The user moves the mouse over an HTML element
onmouseout	The user moves the mouse away from an HTML element
onkeydown	The user pushes a keyboard key
onload	The browser has finished loading the page

The following is an example of the <script> tag embedded in a HTML document using the format:

```html
<html>
<head>
  <title>JavaScript Example</title>
</head>
<body>
<script>
  var title = "JavaScript Programming";
  document.write("Welcome to " + title);
</script>
</body>
</html>
```
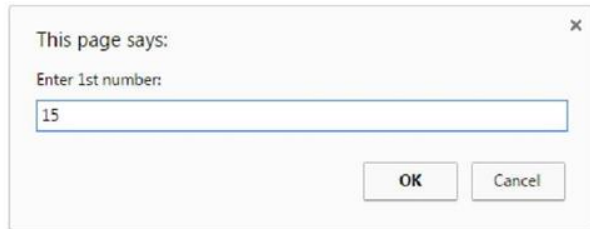
The following is an example of the window object and document object usability within <script> tag embedded in a HTML document:

```html
<html>
<head>
    <title>Prompt Example</title>
</head>
<body>
    <script>
    var myname;
    myname = prompt("What is your name ?", "Your name");
    document.write("Your name is "+ myname);
    alert("Good-bye "+ myname +"!");
    </script>
</body>
</html>
```
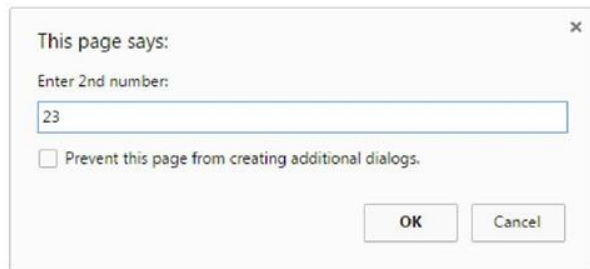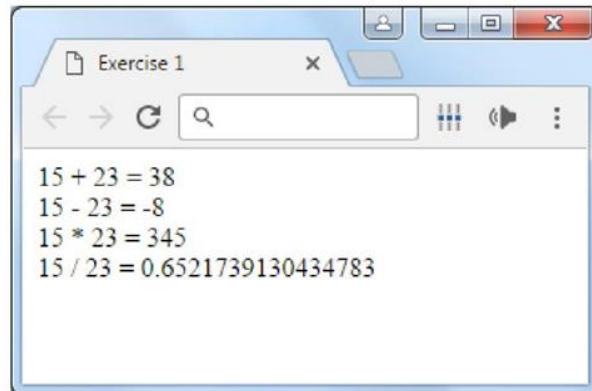
Exercise 1

Get 2 input numbers from the user to demonstrate the calculation as per outcome below:

This page says:

Enter 1st number:

15

OK   Cancel

This page says:

Enter 2nd number:

23

☐ Prevent this page from creating additional dialogs.

OK   Cancel

Exercise 1

```
15 + 23 = 38
15 - 23 = -8
15 * 23 = 345
15 / 23 = 0.6521739130434783
```

Exercise 2

Input person's name and year born to the prompt box and display the name and current age in the alert box as per outcome below:

This page says:

What is your name?

David

OK   Cancel

This page says:

What is your birth year?

1978

☐ Prevent this page from creating additional dialogs.

OK   Cancel

This page says:

Hello David! You are 39 years old!

☐ Prevent this page from creating additional dialogs.

OK

Exercise 3

Input person's name and year born to the prompt box and display the name and current age in the alert box as per outcome below:

This page says:

What is your name?

David

OK   Cancel

This page says:

What is your birth year?

1978

☐ Prevent this page from creating additional dialogs.

OK   Cancel

This page says:

Hello David! You are 39 years old!

☐ Prevent this page from creating additional dialogs.

OK