

## JAVASCRIPT: EXERCISE COVER LECTURE 5 (JAVASCRIPT 1- PART 1)

**Note:**

This exercise **cover lecture 5**. Most of the code can be found in the lecture 5 slides. I just put it together and mix it around.

For this part it is just an introduction to **JavaScript**. We are **not** going to **use** the **lab3** files for now. We are going to use lab3 files in **lab 5**. So keep it.

## INTRODUCTION

JavaScript is a dynamic language that executes within a browser. **JavaScript** code is embedded within an HTML page using the **JavaScript** tag. The **<script>** tag is used to embed JavaScript code. JavaScript code can be embedded in:

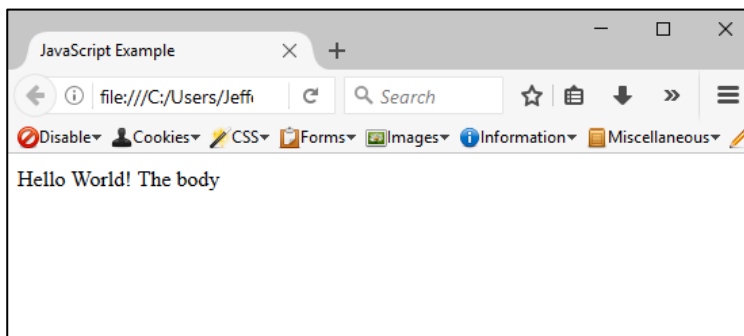
- An external file
- The header of the page
- The body of the page

In this example, JavaScript is embedded within the header. As soon as the page is loaded this code is executed.

```
<!DOCTYPE html>
<html>
<head>
<title>JavaScript Example</title>
<script>
<!--
document.write("Hello World!");
//-->
</script>
</head>

<body>The body</body>
</html>
```

The document will *write* method displays the text.



## INTERNAL JAVASCRIPT CODE

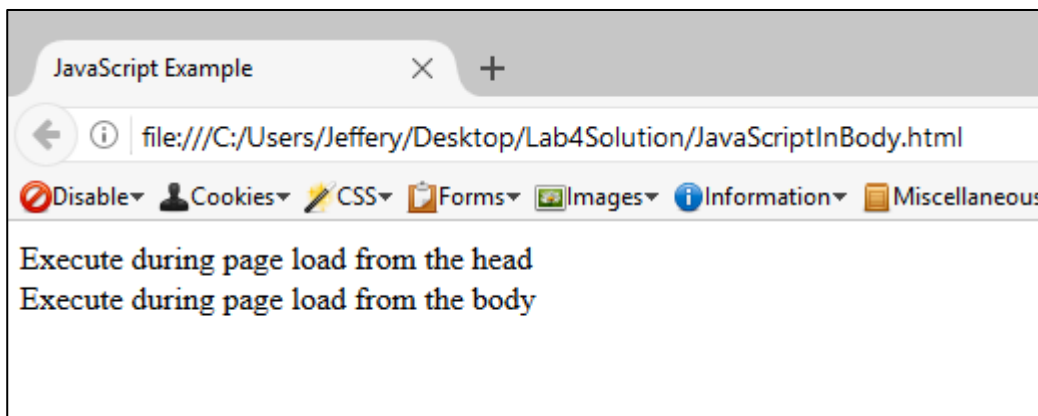
JavaScript code that is not found in a function is executed as the page containing it is loaded. To illustrate this, JavaScript code is placed in the head and body section of an HTML page.

```
<!DOCTYPE html>
<html>
<head>
<title>JavaScript Example</title>
<script>
document.write("Execute during page load from the head<br>");
</script>
</head>

<body>

<script>
document.write("Execute during page load from the body<br>");
</script>

</body>
</html>
```



JavaScript code found in a **function** is not executed until the function is called. If we modify the previous example by adding a function to return a string, the function is not loaded when the page is loaded.

```
<!DOCTYPE html>
<html>
<head>
<title>JavaScript Example</title>
<script>

<!-- function to display the string call H1 or Heading 1 -->
function displayString() {
    return "<h1>Main Heading</h1>"
}
<!-- write first text -->
document.write("Execute during page load from the head<br>");
</script>
```

```
</head>

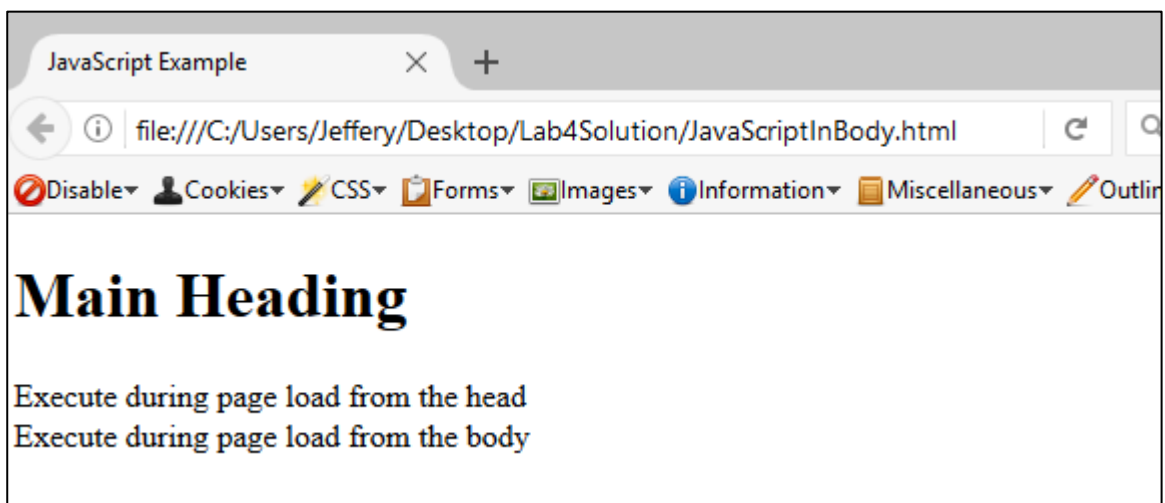
<body>

<script>
<!-- write second text -->
document.write("Execute during page load from the body<br>");
</script>

</body>
</html>
```

#### STUDENT TASK

**Task 1:** Modify the code above to call the function so it will display something like the picture below:

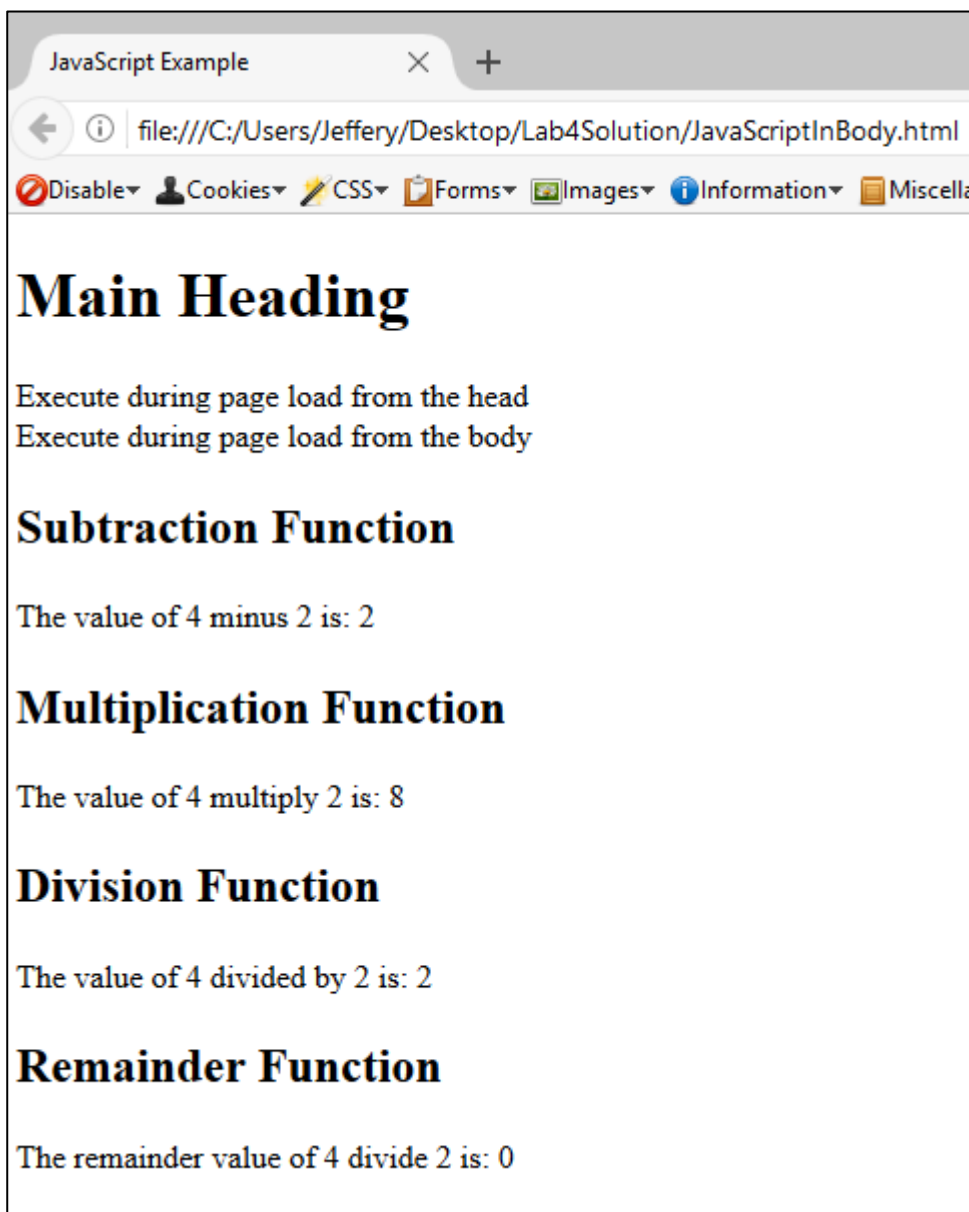


**Task 2:** Using the **same files**, create a new **function** in the **<head>** section so it will return a value of **two number**. Then call the function in the **<body>** section.

Below is the list of function that you need to create:

1. Do a function that return **subtraction** value
2. Do a function that return **multiplication** value
3. Do a function that return **division** value
4. Do a function that return **remainder** value.

Once you done, your **JavaScriptInBody.html** should look like the picture below:



Don't forget to **validate** your page.

**Task 3:** Now you done with **task 2**. Task 3 is put all your **JavaScript** code externally and link it to **JavaScriptInBody.html**

**Note:**

To link your external script it will be something as follow:

```
<script src="javascript.js"></script>
```

1. Create a new file and name it **function.js**.
2. Put all the **JavaScript** code you create in **<head>** into the file **function.js**.
3. Next put a link in the **<head>** section to link to external **JavaScript** files which you name it **function.js**
4. Next create another file and name it **output.js**
5. In this **output.js** files, you will copy all **JavaScript** code that you create in **<body>** section.
6. Then put the script linking in the **<body>** section to link to external **JavaScript** name **output.js**.
7. Once you done, run your page and it will be exactly the same with your **task 2** exercise.
8. What we do here is to put our **JavaScript** externally and link it to our **html** files.
9. Don't forget to validate your page.

**Files that need to be submitted to blackboard are:**

1. JavaScriptInBody.html
2. function.js
3. output.js

Remember to zip all the files above and name it **yournamelab4.zip**