

## How JavaScript is added in HTML pages?

In HTML pages, JavaScript can be implemented using the HTML Tags **<script> ... </script>**

The script codes are to be written within these **<script> ... </script>** tags. It is suggested to keep the script portion within the <Head> tag in an HTML page. However, the same can be placed anywhere within web page.

The <script> tag tell the browser to take all the text between these tags as a script and interpret / execute them accordingly.

### Syntax

```
<script>  
...JavaScript code  
</script>
```

The script tag has two important attributes –

- **Language** – to specify scripting language like JavaScript. Now in the recent versions of HTML (and XHTML, its successor) it is not used.
- **Type** – Indicates the scripting language in use and for JavaScripts, it shall be set to "text/JavaScript".

In accommodating these attributes, the script tag will be like –

```
<script language = "JavaScript" type = "text/JavaScript">  
JavaScript code..  
</script>
```

### Example:

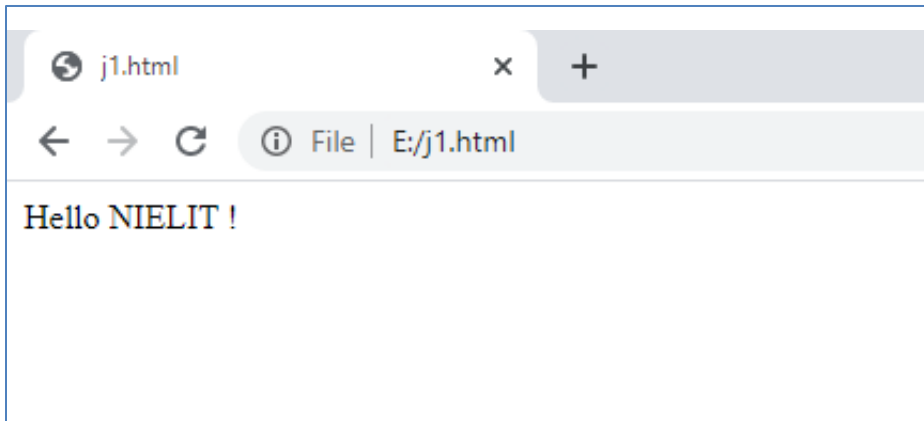
Lets have a code, to simply display Hello NIELIT.

```
<html>  
  <body>  
    <script language = "JavaScript" type = "text/JavaScript">
```

```
document.write("Hello NIELIT !")
```

```
</script>  
</body>  
</html>
```

**This code will give the following result on execution:**

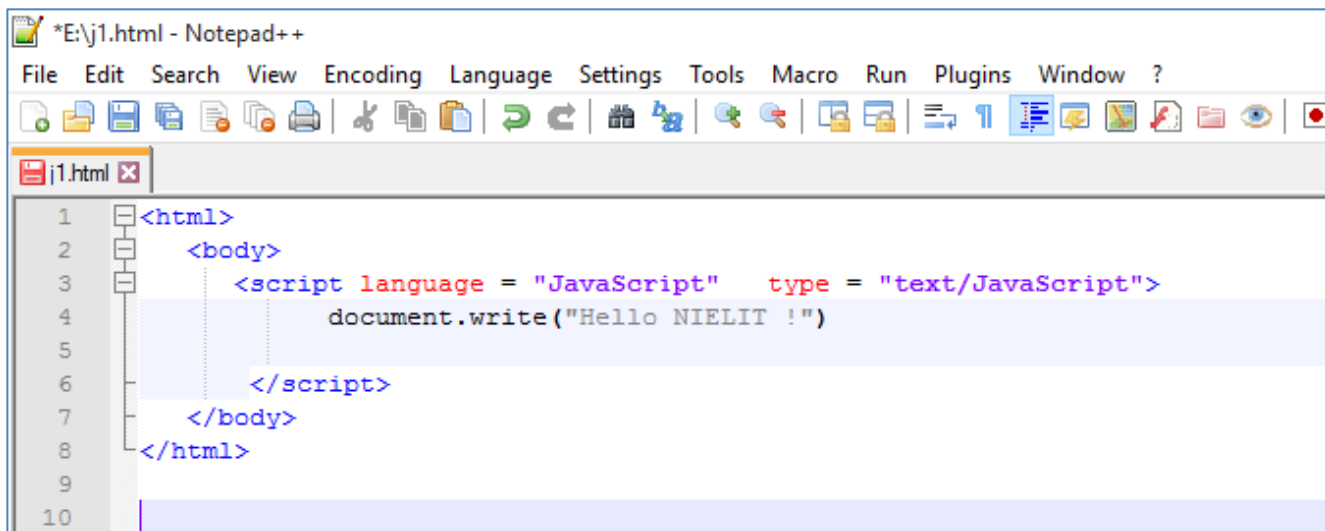


## Working with JavaScript

To start working with JavaScript, we must know the basic code writing rules, some of them are defined as under:

### Whitespace and Line Breaks

By default, JavaScript ignores spaces, tabs, and newlines which are used in JavaScript program code. Spaces, tabs, and newlines can be used freely in a program. These may be used to format and indent the programs in a neat and consistent way that makes the code easy to read and understand.



## Semicolons – Statement terminator

In JavaScript, a **semicolon (;)** character is placed after each statement if we want to write multiple statement in one single line. For example, two variables in one single line:

```
<script language = "JavaScript" type = "text/JavaScript">
    var1 = 10; var2 = 20;
</script>
```

We may omit the semicolon, if each of the statements is placed on a separate line. For example, the above code can also be written without semicolons as

```
<script language = "JavaScript" type = "text/JavaScript">

    var1 = 10
    var2 = 20

</script>
```

However, it is suggested to use semicolons after statement as a good programmer.

## Case Sensitivity

JavaScript is a case-sensitive language i.e. lower case and upper case letters have different meaning. Hence, keywords, variables, function names, and any other identifiers must always be write and used properly keeping the case of the letter.

**For example:** `var1` and `Var1` have different meanings in JavaScript.

## Comments in JavaScript

JavaScript supports two methodology to specify comments like C and C++ .

- **Single line Comment** : Any text content written after `//` is treated as a comment and is ignored by JavaScript. All the content written after `//` till the new line is ignored.
- **Milti line Comment** : Any text between the characters `/*` and `*/` is treated as a comment. This may span to multiple lines or in single line.

### For Example

```
<script language = "JavaScript" type = "text/JavaScript">

    // This is a single line comment in JavaScript.

    /*
    * This is a multi-line comment in JavaScript
    * All content between is comment
    */

</script>
```

## Writing in HTML Document- document.write ()function

**document.write()** function is used to writes a string into the HTML document. **For Example:**

```
<html>
  <body>
    <script language = "JavaScript" type = "text/JavaScript">

      // This is a single line comment in JavaScript.

      document.write("Hello NIELIT !")

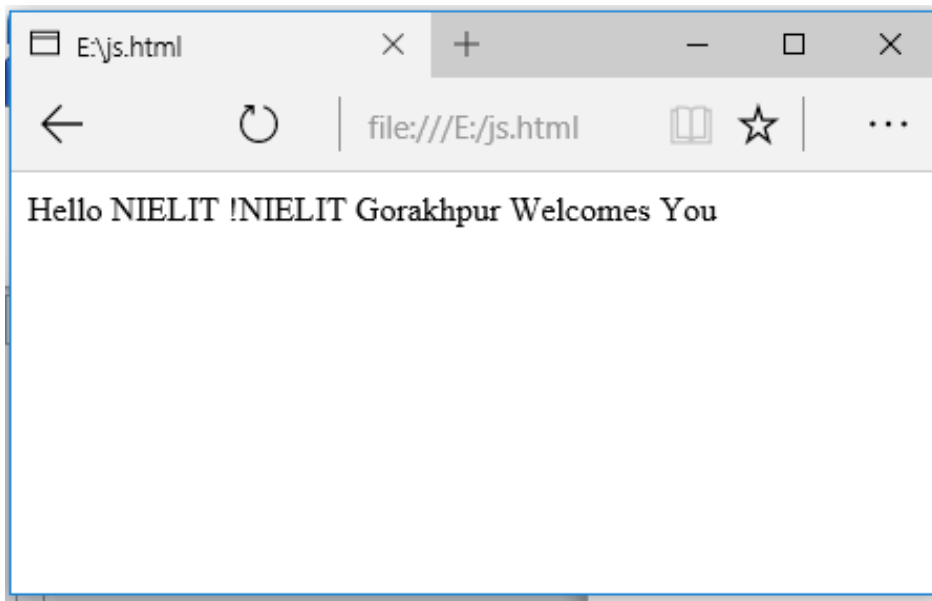
      /*
       * This is a multi-line comment in JavaScript
       * All content between is comment
       */

      document.write("NIELIT Gorakhpur Welcomes You") // in UP State
    </script>
  </body>
</html>
```

A screenshot of the Notepad++ text editor. The title bar shows 'E:\js.html - Notepad++'. The menu bar includes 'File', 'Edit', 'Search', 'View', 'Encoding', 'Language', 'Settings', 'Tools', 'Macro', 'Run', 'Plugins', 'Window', and '?'. The toolbar contains various icons for file operations and editing. The main text area shows the following code:

```
1 <html>
2   <body>
3     <script language = "JavaScript" type = "text/JavaScript">
4
5       // This is a single line comment in JavaScript.
6
7       document.write("Hello NIELIT !")
8
9     /*
10      * This is a multi-line comment in JavaScript
11      * All content between is comment
12      */
13
14     document.write("NIELIT Gorakhpur Welcomes You") // in UP State
15   </script>
16 </body>
17 </html>
```

On run in Browser, the output will be



We have not given any new line character, hence output of both the functions has been displayed in one single line.

### **Assignment**

1. How to implement JavaScript code?
2. How to implement comments in JavaScript? Explain with Examples.