

Godavari Foundation's
Godavari College of Engineering, Jalgaon
Department of Computer

Lab Manual

HTML and Javascript

Practical No:- ____

Date:- _____

Name of Student:- _____

Class:- _____

Roll No:- _____

Title:

Aim: -

Software Requirement: _____

Hardware Requirement:- _____

Theory:-

JavaScript:-

JavaScript is a lightweight, interpreted programming language. It is designed for creating network-centric applications. It is complimentary to and integrated with Java. JavaScript is very easy to implement because it is integrated with HTML. It is open and cross-platform.

In this practical we are designing a calculator with the help of JavaScript. Various Tags used in for designing are as follows.

<SCRIPT></SCRIPT> TAG:-

JavaScript can be implemented using JavaScript statements that are placed within the `<script>... </script>`. The `<script>` tag alerts the browser program to start interpreting all the text between these tags as a script.

Syntax:-

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

The script tag takes two important attributes.

- **Language:-** This attribute specifies about scripting language used. Its value will be javascript.
- **Type:-** This attribute is what is now recommended to indicate the scripting language in use and its value should be set to "text/javascript".

Syntax:-

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

<FORM></FORM> TAG:-

CGI (which stands for common gateway interface), is a mechanism for safely transporting data from a client (a browser) to a server. It is typically used to transfer data from an HTML form to the server. With JavaScript simple forms can be processed without invoking the server.

The form validation script needs to access the form in the HTML page to determine what values the user has filled in.

The general **syntax** for accessing a form element is,

```
document.forms[number].elements[number]
```

The `<form>` element can contain one or more of the following form elements:

- `<input>`
- `<textarea>`
- `<button>`

- <select>
- <option>
- <optgroup>
- <fieldset>
- <label>

<INPUT></INPUT> TAG:-

The <input> tag specifies an input field where the user can enter data. <input> elements are used within a <form> element to declare input controls that allow users to input data. An input field can vary in many ways, depending on the type attribute.

Syntax:-

```
<Input type=" " name=" " value=" " size=" ">
```

<TABLE></TABLE> TAG:-

The HTML tables allow web authors to arrange data like text, images, links, other tables, etc. into rows and columns of cells. The HTML tables are created using the <table> tag in which the <tr> tag is used to create table rows and <td> tag is used to create data cells. The elements under <td> are regular and left aligned by default.

Syntax:-

```
<table>
<tr>
<td>      </td>
<td>      </td>
</tr>
</table>
```

OnClick Event:-

The onclick event handler is defined in an <input> tag.

Syntax:-

```
<input type="button" name="bt1" onclick = "JavascriptCode">
```

It executes some JavaScript code or function when the pointing device button (for example mouse) is clicked on button object.

```
onclick = "JavascriptCode"
```

Source Code:-

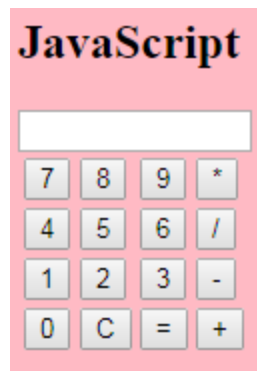
```
<html>
<head>
<title>Simple Calculator</title>
<script language="Javascript">
function calc(ch)
{
    if(ch == "=")
    {
        document.form1.text1.value=
        eval(document.form1.text1.value);
    }
    else
    {
        if(ch == "C")
        {
            document.form1.text1.value="";
        }
        else
        {
            document.form1.text1.value +=ch;
        }
    }
}
</script>
</head>
<body bgcolor="pink">
<h2> JavaScript </h2>
<form name="form1">
<input type="text" name="text1" value="" size=12>
<table>
<tr>
<td><input type="button" value="7" onClick="calc('7')"></td>
<td><input type="button" value="8" onClick="calc('8')"></td>
<td><input type="button" value="9" onClick="calc('9')"></td>
<td><input type="button" value="*" onClick="calc('*')"></td>
</tr>
<tr>
<td><input type="button" value="4" onClick="calc('4')"></td>
<td><input type="button" value="5" onClick="calc('5')"></td>
<td><input type="button" value="6" onClick="calc('6')"></td>
<td><input type="button" value="/" onClick="calc('/')"></td>
```

```

</tr>
<tr>
<td><input type="button" value="1" onClick="calc('1')"></td>
<td><input type="button" value="2" onClick="calc('2')"></td>
<td><input type="button" value="3" onClick="calc('3')"></td>
<td><input type="button" value="-" onClick="calc('*-')"></td>
</tr>
<tr>
<td><input type="button" value="0" onClick="calc('0')"></td>
<td><input type="button" value="C" onClick="calc('C')"></td>
<td><input type="button" value="=" onClick="calc('=')"></td>
<td><input type="button" value="+" onClick="calc('+')"></td>
</tr>
</table>
</form>
</body>
</html>

```

Output:-



Conclusion:-
