**Practical No. 1: Write simple Javascript with HTML for Arithmetic expression evaluation and message printing**

1. **Practical Significance:**JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

### Relevant Program Outcomes (POs):

* Basic knowledge: Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problems.
* Discipline knowledge: Apply Computer Programming knowledge to solve the computer group related problems.
* Experiments and practice: Plan to perform experiments and practices to use the results to solve the computer group related problems.
* Engineering tools: Apply relevant Computer programming / technologies and tools with an understanding of the limitations.
* Individual and Team work: Function effectively as a leader and team member in diverse/multidisciplinary teams.
* Communication: Communicate effectively in oral and written form.

1. **Competency and Practical skills:**
2. Write a simple Javascript to perform arithmetic expressions.

### Relevant Course Outcome(s):

Create interactive Webpage(using program flow control structure)

### Practical Outcome (PrOs):

Develop a user interactive Webpage and print message.

### Relevant Affective domain related Outcome(s):

* 1. Follow safety practices.
  2. Practice good housekeeping
  3. Demonstrate working as a leader/ a team member.
  4. Follow ethical practices.

**VII. Minimum Theoretical Background:**

JavaScript can be implemented using JavaScript statements that are placed within the <script>... </script> HTML tags in a web page.You can place the <script> tags, containing your JavaScript, anywhere within your web page, but it is normally recommended that you should keep it within the <head> tags.The <script> tag alerts the browser program to start interpreting all the text between these tags as a script. A simple syntax of your JavaScript will appear as follows.

<script ...>

JavaScript code

</script>

The script tag takes two important attributes −

Language − This attribute specifies what scripting language you are using. Typically, its value will be javascript. Although recent versions of HTML (and XHTML, its successor) have phased out the use of this attribute.

Type − This attribute is what is now recommended to indicate the scripting language in use and its value should be set to "text/javascript".

**Arithmetic Operators**

JavaScript supports the following arithmetic operators −

|  |  |
| --- | --- |
| Sr.No. | Operator & Description |
| 1 | + (Addition)  Adds two operands |
| 2 | - (Subtraction)  Subtracts the second operand from the first |
| 3 | \* (Multiplication)  Multiply both operands |
| 4 | / (Division)  Divide the numerator by the denominator |
| 5 | % (Modulus)  Outputs the remainder of an integer division |
| 6 | ++ (Increment)  Increases an integer value by one |
| 7 | -- (Decrement)  Decreases an integer value by one |

**alert() Method:**

alert(message) – message is String value to be displayed

**prompt() Method**

displays a dialog box that prompts the visitor for input.

A prompt box is often used if you want the user to input a value before entering a page.

1. **Resources required**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. No. | Name of Resource | Broad specification | Quantity | Remark (If any) |
| 1 | Computer System | Computer (i3-i5 preferable), RAM minimum 2 GB and onwards | As per batch size | For all Experiments |
| 2 | Operating System | Windows / Linux |
| 3 | Development Software | Browser and Notepad/any Text Editor  Free Webpage Designing Tool  Any IDE |

1. **Resources used**

| S. No. | Name of Resource | Broad Specification | Qty | Remarks (If any) |
| --- | --- | --- | --- | --- |
|  | Computer System  with broad specifications | Intel Core –i5  RAM – 8 GB | 1 PC / Student |  |
|  | Operating System | Windows 10 |  |
|  | Development Software | MicromediaDreamviewer 8 |  |

Perform program to show various arithmetic operation on numerical values

1. **Result**

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1. **Conclusion**

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| Marks Obtained | | | Dated Signature of Teacher |
| Process Related ( 10 ) | Product Related ( 15) | Total ( 25 ) |  |
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