**EXPERIMENT NO. 04**

**Title: JavaScript**

**Aim:** To use the features of JavaScript while designing web site

**Objective:** Understand and use JavaScript for web site designing

**Relevance:** JavaScript is a scripting language used to develop web pages. JS allows developers to create a dynamic and interactive web page to interact with visitors and execute complex actions. It also enables users to load content into a document without reloading the entire page.

**Theory:**

Write 5 Technical and 5 MCQ Question on Said Topic

**Task to Do in Lab:**

**Problem stmt1:**

Write a JavaScript program to demonstrate the function (for code reusability). Ask user to enter two numbers and Print all prime numbers between range of numbers entered by user.

**Problem stmt2:**

[Use JavaScript to display pop up boxes (alert box, an alert box with line breaks, confirm box, prompt box)](https://www.programmingempire.com/popup-boxes-in-javascript/)

**Problem stmt3:**

[Write a JavaScript code to accept 10 numbers and check how many are +ive,  -ive, and zero.](https://www.programmingempire.com/program-to-find-the-count-of-negative-and-positive-numbers-in-javascript/)

**Problem stmt4:**

[Write a Program in JavaScript to find the factorial of a number between 1 to 10](https://www.programmingempire.com/display-factorial-of-first-ten-integers-in-javascript/)

**Problem stmt5:**

[Write a Program in JavaScript to find the reverse of a digit.](https://www.programmingempire.com/find-reverse-of-a-number-in-javascript/)

**Problem stmt6:**

Create the registration page and Write JavaScript to validate the following fields of the Registration page.

1. First Name (Name should contains alphabets and the length should not be less than 6 characters).
2. Password (Password should not be less than 6 characters).
3. E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)
4. Mobile Number (Phone number should contain 10 digits only).
5. Last Name and Address (should not be Empty).

More Practice problems (Extra)

1. [Use JavaScript to display pop up boxes (alert box, an alert box with line breaks, confirm box, prompt box)](https://www.programmingempire.com/popup-boxes-in-javascript/)
2. [Write a JavaScript code to accept 10 numbers and check how many are +ive,  -ive, and zero.](https://www.programmingempire.com/program-to-find-the-count-of-negative-and-positive-numbers-in-javascript/)
3. [Write a Program in JavaScript to find the factorial of a number between 1 to 10](https://www.programmingempire.com/display-factorial-of-first-ten-integers-in-javascript/)
4. [Write a JavaScript code block, which greets a user with a message Welcome’. When a user leaves this page, the ‘Good-bye’ alert dialog box is displayed](https://www.programmingempire.com/example-of-onload-and-onbeforeunload-in-javascript-2/)
5. [When user selects a color from the drop-down list, change the background color of a div.](https://www.programmingempire.com/example-of-handling-onchange-event-in-javascript/)
6. Create a student registration form and show the form details. After clicking on submit button following validations must be performed:
   1. Clear the previous value when a field is selected.
   2. Display warning message when a field is left blank.
7. [Change the background color of a paragraph randomly using JavaScript.](https://www.programmingempire.com/change-the-background-color-of-a-web-page-randomly/)
8. [Create a JavaScript function to sort elements of an array.](https://www.programmingempire.com/how-to-sort-an-array-of-elements-using-javascript/)

**Conclusion:**

Write the crux of the experiment. Here crux means very important point, complicated and again it should be understandable by you. Do not write conclusion like thus we have studied the ……… in JavaScript