EXP.NO: 2	**Write JavaScript Program to validate the following fields of the HTML Registration page.**

AIM:

To write JavaScript code to validate user input in a registration form. The validation will ensure that the data entered by the user meets specific criteria for each field. This will help in maintaining data integrity and prevent invalid submissions.

ALGORITHM:

1. Input:

- The user fills in the following fields: **First Name**, **Password**, **E-mail**, **Mobile Number**, **Last Name**, and **Address**.

2. Validation Steps:

1. **Validate First Name:**

   o Check if the first name contains **only alphabets**.

   o Ensure the length of the **First Name** is **at least 6 characters**.

   o If any of these conditions fail, display an error message indicating the required input.

2. **Validate Password:**

   o Check if the password is **at least 6 characters long**.

   o If it is less than 6 characters, display an error message.

3. **Validate E-mail:**

   o Use a **regular expression** to check if the email follows the standard pattern: name@domain.com.

   o Ensure that the email contains **no invalid characters** and matches the required pattern.

   o If it doesn't match, display an error message indicating an invalid email format.

4. **Validate Mobile Number:**

   o Check if the mobile number contains **exactly 10 digits**.

   o Ensure there are **no alphabets or special characters**.

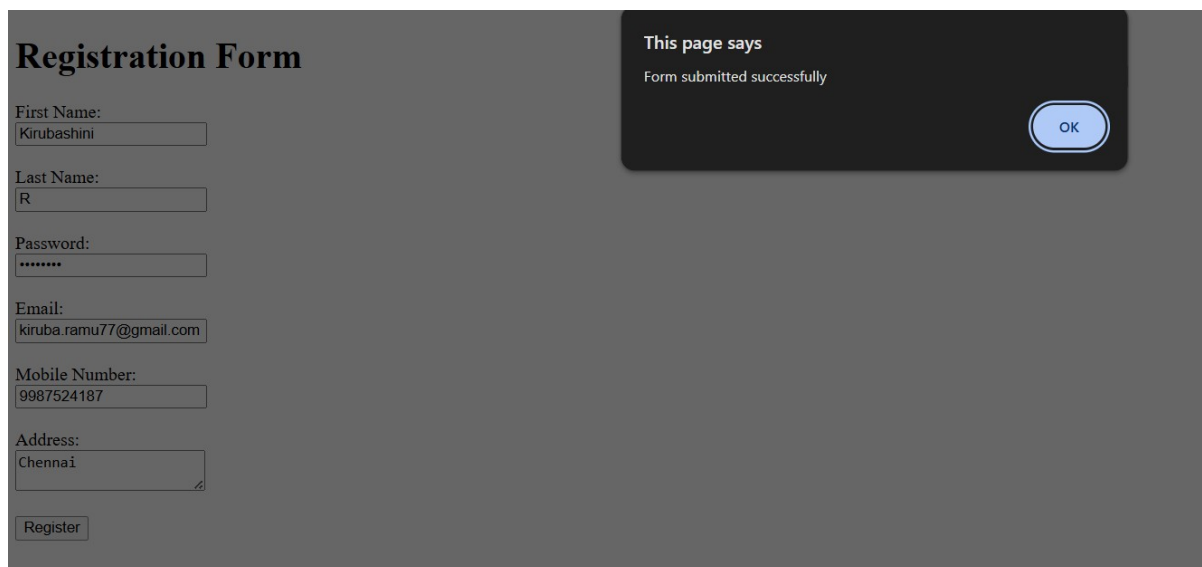- If the number is invalid, display an error message indicating the correct format.

5. **Validate Last Name:**

   - Ensure the **Last Name** field is **not empty**.

   - If it is empty, display an error message.

6. **Validate Address:**

   - Ensure the **Address** field is **not empty**.

   - If it is empty, display an error message.

Output:

HTML Code (form.html):

```html
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Registration Form</title>

  <script src="script.js" defer></script>

</head>
```

```html
<body>
    <h1>Registration Form</h1>
    <form onsubmit="return validateform()">
        <label>First Name:</label><br>
        <input type="text" id="fname"><br><br>


        <label>Last Name:</label><br>
        <input type="text" id="lname"><br><br>


        <label>Password:</label><br>
        <input type="password" id="password"><br><br>


        <label>Email:</label><br>
        <input type="text" id="email"><br><br>


        <label>Mobile Number:</label><br>
        <input type="text" id="mobile"><br><br>


        <label>Address:</label><br>
        <textarea id="address"></textarea><br><br>


        <input type="submit" value="Register">
    </form>
</body>
</html>
```

JavaScript Code (script.js) :

```javascript
function validateform() {

    let fname=document.getElementById("fname").value;

    let lname=document.getElementById("lname").value;

    let password=document.getElementById("password").value;

    let email=document.getElementById("email").value;

    let mobile=document.getElementById("mobile").value;

    let address=document.getElementById("address").value;

    fname=fname.trim()

    let namepattern=/^[a-zA-Z]+$/;

    let emailpattern=/^[a-zA-Z0-9.+-_%]+@[a-zA-Z0-9-.]+\.[a-z]{2,}$/;

    let mobilepattern=/^[0-9]{10}$/;


    if (!namepattern.test(fname) || fname.length < 6) {

        alert("First Name must contain only alphabets and at least 6 characters long");

        return false;

    }


    if(!emailpattern.test(email)) {

        alert("Please Enter a valid E-Mail ID");

        return false;

    }


    if(!mobilepattern.test(mobile)) {

        alert("Mobile Number must contain exactly 10 digits");

        return false;
```

```javascript
        }

    if (password.length < 6) {

        alert("Password must be at least 6 characters long");

        return false;

    }


    if(lname===""){

        alert("Last Name cannot be empty");

        return false;

    }


    if (address===""){

        alert("Address cannot be empty");

        return false;

    }


    alert("Form Submitted Successfully");

    return true;

}
```

RESULT:

Thus the HTML page with Form was created and validated using Javascript