EXP 2: Date:	a) **Write JavaScript to validate the following fields of the Registration page.** b) **First Name (Name should contains alphabets and the length Should not be less than 6 characters).** c) **Password (Password should not be less than 6 characters length).** d) **E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)** e) **Mobile Number (Phone number should contain 10 digits only).** f) **Last Name and Address (should not be Empty).**

AIM :
This project aims to design a registration form with robust validation for fields like First Name, Password, Email, Mobile Number, Last Name, and Address, using JavaScript for client-side validation and HTML/CSS for structure and styling.

ALGORITHM :
Start

1. **Setup Registration Form:**
   - Create an HTML form with fields: **First Name, Last Name, Password, Email, Mobile Number, and Address**.
   - Add an event listener to validate the form on submission.
2. **Capture User Input:**
   - Retrieve values entered in the form fields using JavaScript (`document.getElementById`).
3. **Validate First Name:**
   - Ensure the first name contains only alphabets using a **regular expression** (`/^[A-Za-z]+$/`).
   - Ensure the **length is at least 6 characters**.
   - If validation fails, **show an alert message** and prevent form submission.
4. **Validate Password:**
   - Ensure the **password has at least 6 characters**.
   - If validation fails, **show an alert message** and prevent form submission.
5. **Validate Email:**
   - Ensure the email follows the **standard format** using a **regular expression** (`/^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$/`).
   - If validation fails, **show an alert message** and prevent form submission.
6. **Validate Mobile Number:**
   - Ensure the mobile number contains **exactly 10 digits** using a **regular expression** (`/^[0-9]{10}$/`).
   - If validation fails, **show an alert message** and prevent form submission.
7. **Validate Last Name:**
   - Ensure the last name **is not empty**.
   - If validation fails, **show an alert message** and prevent form submission.
8. **Validate Address:**
   - Ensure the address **is not empty**.
   - If validation fails, **show an alert message** and prevent form submission.
9. **Submit Form:**
   - If **all validations pass**, display **"Registration Successful!"** and allow form submission.

CODE :

```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>
<style>
body {
    font-family: 'Arial', sans-serif;
    background-color: #f4f7fc;
    margin: 0;
    padding: 0;
    color: #333;
}

h2 {
    text-align: center;
    color: #4CAF50;
    padding-top: 20px;
}

.form-container {
    width: 50%;
    margin: 30px auto;
    padding: 20px;
    background-color: #fff;
    border-radius: 8px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

input, textarea {
    width: 100%;
    padding: 12px;
    margin: 10px 0;
    border-radius: 4px;
    border: 1px solid #ddd;
    font-size: 16px;
}

textarea {
    resize: vertical;
    min-height: 100px;
}
input[type="submit"] {
    background-color: #4CAF50;
    color: white;
    border: none;
    cursor: pointer;
    font-size: 18px;
    transition: background-color 0.3s ease;
}
```

```css
input[type="submit"]:hover {
    background-color: #45a049;
}

label {
    font-weight: bold;
    display: block;
    margin: 10px 0 5px;
}

.error-message {
    color: red;
    font-size: 14px;
    display: none;
}

@media screen and (max-width: 768px) {
    .form-container {
        width: 90%;
    }
}
</style>
</head>
<body>
```

```html
<h2>Registration Form</h2>

<div class="form-container">
<form id="registrationForm">
    <label for="firstName">First Name:</label>
    <input type="text" id="firstName" name="firstName">
    <span class="error-message" id="firstNameError">First Name must contain only alphabets
and be at least 6 characters long.</span>

    <label for="lastName">Last Name:</label>
    <input type="text" id="lastName" name="lastName">
    <span class="error-message" id="lastNameError">Last Name cannot be empty.</span>

    <label for="password">Password:</label>
    <input type="password" id="password" name="password">
    <span class="error-message" id="passwordError">Password must be at least 6 characters
long.</span>

    <label for="email">Email:</label>
    <input type="email" id="email" name="email">
    <span class="error-message" id="emailError">Please enter a valid email address.</span>

    <label for="mobile">Mobile Number:</label>
    <input type="text" id="mobile" name="mobile">
    <span class="error-message" id="mobileError">Mobile number must be exactly 10 digits
long.</span>
```

```html
    <label for="address">Address:</label>
      <textarea id="address" name="address"></textarea>
      <span class="error-message" id="addressError">Address cannot be empty.</span>

      <input type="submit" value="Register">
</form>
</div>

<script>
document.getElementById("registrationForm").addEventListener("submit", function(event) {
    let isValid = true;

    const firstName = document.getElementById("firstName").value;
    const lastName = document.getElementById("lastName").value;
    const password = document.getElementById("password").value;
    const email = document.getElementById("email").value;
    const mobile = document.getElementById("mobile").value;
    const address = document.getElementById("address").value;

    const namePattern = /^[A-Za-z]+$/;
    const emailPattern = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$/;
    const mobilePattern = /^[0-9]{10}$/;

    function showError(id, condition) {
        const errorElement = document.getElementById(id);
        if (condition) {
            errorElement.style.display = "block";
            isValid = false;
        } else {
            errorElement.style.display = "none";
        }
    }

    showError("firstNameError", !namePattern.test(firstName) || firstName.length < 6);
    showError("lastNameError", lastName.trim() === "");
    showError("passwordError", password.length < 6);
    showError("emailError", !emailPattern.test(email));
    showError("mobileError", !mobilePattern.test(mobile));
    showError("addressError", address.trim() === "");

    if (!isValid) {
        event.preventDefault();
    } else {
        alert("Registration Successful!");
    }
});
</script>
</body>
</html>

}
```
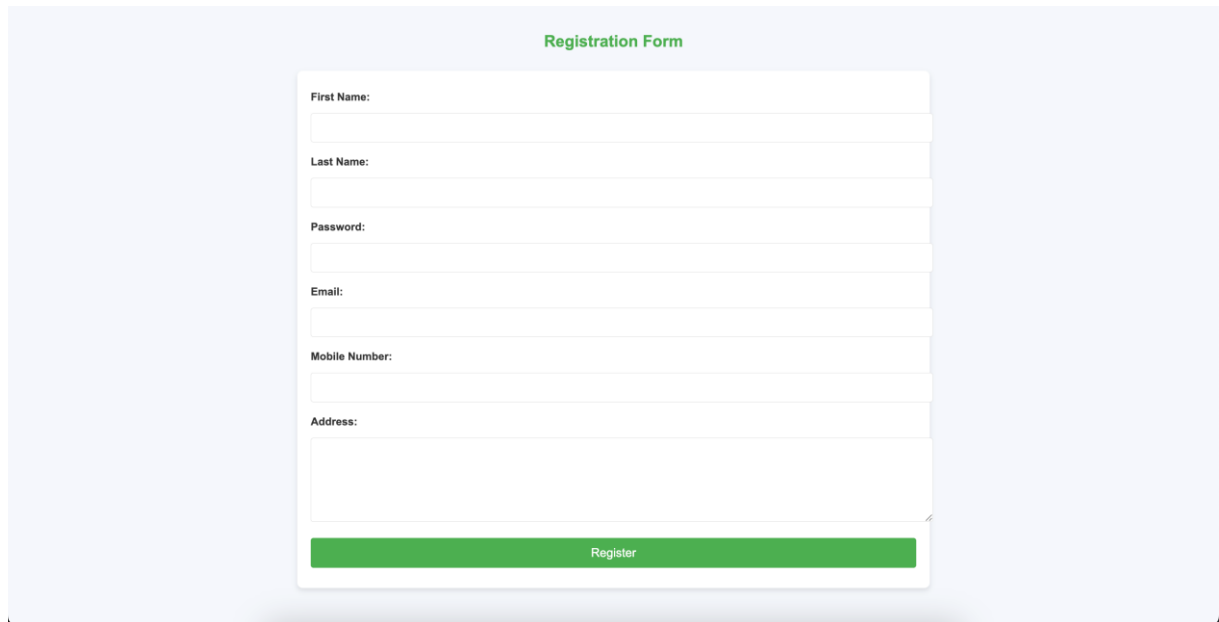
OUTPUT :

Registration Form

First Name:

Last Name:

Password:

Email:

Mobile Number:

Address:

Register

RESULT :
Thus the give task is executed successfully.