Experiment-1

1) Aim

- Student Registration Form with HTML5 Validation.

2) Objective

- Design and implement a basic student registration form that collects user information and validates inputs using HTML5 features.

3) Procedure / Algorithm

- **Open a code editor** (e.g., VS Code, Sublime Text, Notepad++) on your system.
- **Create an HTML file** (e.g., `registration.html`).
- Inside the HTML file, write the basic HTML structure using `<!DOCTYPE html>`, `<html>`, `<head>`, and `<body>` tags.
- In the `<body>`, create a `<form>` element and add the following fields:
- `<input type="text" name="name" required>` for Name
- `<input type="email" name="email" required>` for Email
- `<input type="number" name="age" min="1" required>` for Age
- Add HTML5 validation attributes:
- Use the `required` attribute to make fields mandatory.
- Use `type="email"` for email format validation.
- Use `type="number"` with a `min` value for age validation.
- Add a **submit button** inside the form:
  `<input type="submit" value="Register">`
- Save the file and open it in a web browser to test.
- Try submitting the form with empty fields or incorrect input to see the HTML5 validation in action.

5)Program code->

```
<!DOCTYPE html>\

<html lang="en">

<head>

 <meta charset="UTF-8">

 <title>Student  Registration  Form</title>

 <style>

  body {

   font-family: Arial, sans-serif;

   background: #f0f0f0;

  }

  .form-container {

   max-width: 400px;

   margin: 2rem auto;

   padding: 2rem;

   background: white;

   border-radius:  8px;

   box-shadow: 0 2px 10px rgba(0,0,0,0.1);

  }

  .form-container h2 {

   text-align: center;

   margin-bottom:  1.5rem;

  }
```

```css
label {

  display: block;

  margin-top: 1rem;

}

input[type="text"],

input[type="email"],

input[type="number"] {

  width: 100%;

  padding: 0.5rem;

  margin-top: 0.3rem;

  border: 1px solid #ccc;

  border-radius: 5px;

}

button {

  margin-top: 1.5rem;

  width: 100%;

  padding: 0.7rem;

  background-color: #3498db;

  color: white;

  border: none;

  border-radius: 5px;

  cursor: pointer;

}

button:hover {

  background-color: #2980b9;
```

```html
    }

  </style>

</head>

<body>


<div class="form-container">

  <h2>Student Registration</h2>

  <form onsubmit="return validateForm()" novalidate>

    <label for="name">Full Name:</label>

    <input type="text" id="name" name="name" pattern="[A-Za-z\s]+" required title="Name should contain only letters and spaces">


    <label for="email">Email Address:</label>

    <input type="email" id="email" name="email" required title="Enter a valid email address">


    <label for="age">Age:</label>

    <input type="number" id="age" name="age" min="10" max="100" required title="Age must be between 10 and 100">


    <button type="submit">Register</button>

  </form>

</div>


<script>

  function validateForm() {

    const form = document.querySelector('form');
```

```
    if (!form.checkValidity()) {

      form.reportValidity();

      return false;

    }

    alert("Registration  successful!");

    return true;

  }
</script>



</body>

</html>
```

6)Output->

Student Registration

Full Name:

Email Address:

Age:

Register