a)Develop a static web application and deploy it in any one of the web servers (WAMP/Apache Tomcat/IIS).

Code:-

```
<html>
<head>
  <title>Registration form</title>
</head>
<body>
  <form>
    <center>
      <h1>Registration Form</h1>
      <table border="5">
        <tr>
          <th>Username: </th>
          <th><input id="Username" type="text"/></th>
        </tr>
        <tr>
          <th>Password: </th>
          <th><input id="Password" type="text"/></th>
        </tr>
        <tr>
          <th>Email: </th>
          <th><input id="Email" type="email"/></th>
        </tr>
```

```
        <tr>

          <th>Mobile: </th>

          <th><input id="mobile" type="number"/></th>

        </tr>

        <tr>

          <td colspan="2">

            <center>

              <input type="submit" onsubmit="" />

              <input type="reset" onsubmit="" />

            </center>

          </td>

        </tr>

      </table>

    </center>

  </form>

  </body>

</html>
```

OUTPUT:-

b)Develop a JavaScript program to validate the client-side user input data (Example: username, password, email, phone number).

Code:-

```html
<html>
  <head>
    <title>Registration form</title>
  </head>
  <body>
    <form>
      <center>
        <h1>Registration Form</h1>
        <table border="5">
          <tr>
            <th>Username: </th>
            <th><input id="Username" type="text" required/></th>
          </tr>
          <tr>
            <th>Password: </th>
            <th><input id="Password" type="text"/></th>
          </tr>
          <tr>
            <th>Email: </th>
            <th><input id="Email" type="text"/></th>
          </tr>
          <tr>
            <th>Mobile: </th>
            <th><input id="mobile" type="number"/></th>
          </tr>
          <tr>
            <td colspan="2">
              <center>
                <input type="button" onclick="Validate()" value="Submit" />
                <input type="reset" />
              </center>
            </td>
          </tr>
        </table>
```
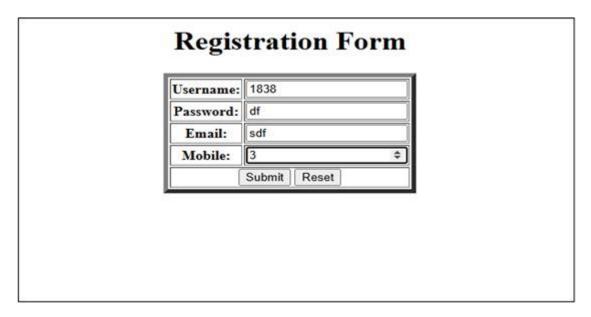
```
        </center>
      </form>
   </body>
   <script>
     function Validate()
     {
       var name = document.getElementById("Username").value;
       var pwd = document.getElementById("Password").value;
       var mail = document.getElementById("Email").value;
       var phno = document.getElementById("mobile").value;
       const pwdValid = /^(?=.*[a-z])(?=.*[A-Z])(?=.*\d)(?=.*[@.#$!%*?&])[A-Za-
z\d@.#$!%*?&]{8,15}$/;
       const emailValid = /^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$/;
       const nameValid = /^[a-zA-Z]$/;
        var atposition=mail.indexOf("@");
       var dotposition=mail.lastIndexOf(".");
       if(name==="" || name.length<3)
          alert("max characters should be 3-25");
       else if(!nameValid.test(name))
          alert("name should contain only alphabets");
       if(pwd.length<8){
          alert("password should be atleast 8 characters");
       }
       else if(!pwdValid.test(pwd)){
          alert("password should contain atleast 1 Capital,1 special character and numerical
value");
       }
       if(mail.length===""||mail.length<4)
          alert("email should be atleast 4 characters")
       else if(atposition<1 || dotposition<atposition+2 || dotposition+2>=mail.length){
          alert("Please enter a valid e-mail address \n atpostion:"+atposition+"\n
dotposition:"+dotposition);
       }
       if(phno.length<10 || phno.length>10)
          alert("length of mobile no should be 10 digits");
     }
   </script>
</html>
```

OUTPUT:-

Enter the data without following constraints and click on the **Submit button** the Outputs are as follows

localhost says

name should contain only alphabets

OK

Mobile: 3

Submit   Reset

localhost says

email should be atleast 4 characters

OK

Mobile: 3

Submit   Reset

localhost says

password should be atleast 8 characters

OK

Mobile: 3

Submit   Reset