```php
<!-- Practical-11: Write a PHP script to perform password validation as per rules given.

Name: Angat Shah
Enrollment No: 202203103510097
Branch: B.Tech Computer Science and Engineering  -->

<!DOCTYPE html>
<html>
<head>
  <title>Practical11</title>
  <style>
    body {
      display: grid;

    }
    a,
    a:hover {
      color: #333
    }
    #btn{
      margin-bottom: 10px;
      border-radius: 15px;
      margin-left:150px;
    }
  </style>
</head>
<body>
  <h1>Practical11</h1>
  <form method="POST" action="">
    <label for="password">Password:</label>
    <input type="password" name="password" id="password" required>
    <input type="checkbox" onclick="myFunction()">Show Password
    <ul>
      <li>Password must be between 8 and 20 characters long.</li>
      <li>Password must contain at least one uppercase letter.</li>
      <li>Password must contain at least one lowercase letter.</li>
      <li>Password must contain at least one digit.</li>
      <li>Password must contain at least one special character.</li>
    </ul>
    <input type="submit" id="btn" value="Submit" style="width:100px; background-color: lightgreen;
height:30px;">
  </form>

  <?php
  function isPasswordValid($password)
  {
    $minLength = 8;
    $maxLength = 20;
    $requiresUppercase = true;
    $requiresLowercase = true;
    $requiresDigit = true;
    $requiresSpecialChar = true;
    $passwordLength = strlen($password);
    if ($passwordLength < $minLength || $passwordLength > $maxLength) {
      return "Password must be between 8 and 20 characters long.";
    }
    if ($requiresUppercase && !preg_match('/[A-Z]/', $password)) {
      return "Password must contain at least one uppercase letter.";
```

```php
58          }
59          if ($requiresLowercase && !preg_match('/[a-z]/', $password)) {
60              return "Password must contain at least one lowercase letter.";
61          }
62          if ($requiresDigit && !preg_match('/[0-9]/', $password)) {
63              return "Password must contain at least one digit.";
64          }
65          if ($requiresSpecialChar && !preg_match('/[^A-Za-z0-9]/', $password)) {
66              return "    ";
67          }
68          return "Password is valid.";
69      }
70
71      $password = $_POST['password'];
72      $validationResult = isPasswordValid($password);
73      echo $validationResult;
74  ?>
75  <script>
76      function myFunction() {
77          var x = document.getElementById("password");
78          if (x.type === "password") {
79              x.type = "text";
80          } else {
81              x.type = "password";
82          }
83      }
84  </script>
85 </body>
86 </html>
```