BMI CALCULATOR

1.Input.html:

```
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>BMI Calculator</title>
  <style type="text/css">
    /* Reset some default styles */
    body, h1, form, label, input, button {
      margin: 0;
      padding: 0;
      box-sizing: border-box;
    }
    /* General Styles */
    body {
      font-family: Arial, sans-serif;
      background-color: aqua;
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
    }
    /* Container Styles */
    .container {
      background: pink;
```

```
padding: 20px;
      border-radius: 8px;
      box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
      width: 300px;
text-align: center;
   }
h1 {
      margin-bottom: 20px;
      color:blue;
   }
/* Form Styles */
    form {
      display: flex;
      flex-direction: column;
      gap: 15px;
   }
label {
      font-weight: bold;
      color: red;
    }
input[type="number"] {
      padding: 10px;
      border: 1px solid #ddd;
      border-radius: 4px;
      font-size: 16px;
   }
button {
      padding: 10px;
      border: none;
      border-radius: 4px;
      background-color: black;
```

```
color: white;
      font-size: 16px;
      cursor: pointer;
      transition: background-color 0.3s ease;
    }
 button:hover {
      background-color: #0056b3;
    }
#result {
      margin-top: 20px;
    }
#bmi-value {
      font-weight: bold;
      color: #007bff;
    }
  </style>
</head>
<body>
  <div class="container">
    <h1>BMI Calculator</h1>
    <form action="bmicalculator" method="post">
      <label for="weight">Weight (kg):</label>
      <input type="number" id="weight" name="weight" step="0.1" required>
      <label for="height">Height (cm):</label>
      <input type="number" id="height" name="height" step="0.1" required>
      <button type="submit">Calculate BMI</button>
    </form>
    <div id="result">
      Your BMI is: <span id="bmi-value">--</span>
    </div>
  </div>
```

</body>

</html>

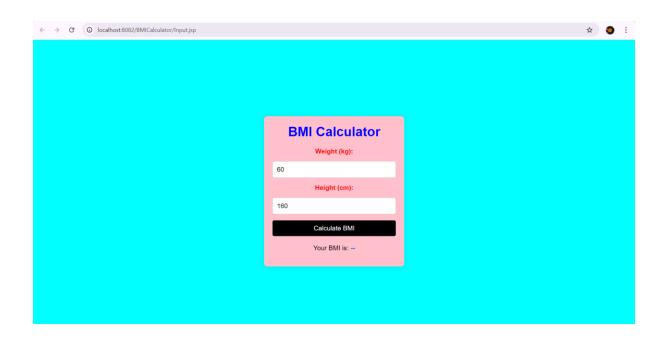
2.bmicalculator.Servlet:

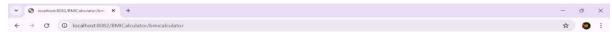
```
package P1;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
* Servlet implementation class bmicalculator
*/
@WebServlet("/bmicalculator")
public class bmicalculator extends HttpServlet {
        private static final long serialVersionUID = 1L;
  /**
  * @see HttpServlet#HttpServlet()
  */
  public bmicalculator() {
    super();
    // TODO Auto-generated constructor stub
  }
        /**
        * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
        */
```

```
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
               // TODO Auto-generated method stub
               response.getWriter().append("Served at: ").append(request.getContextPath());
       }
       /**
        * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
        */
       protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                double weight = Double.parseDouble(request.getParameter("weight"));
          double heightCm = Double.parseDouble(request.getParameter("height"));
          PrintWriter pw=response.getWriter();
            double heightM = heightCm / 100;
            double bmi = weight / (heightM * heightM);
            if (bmi < 18.5) {
               pw.println("<h1>"+"You are underweight"+" "+ bmi +"</h1>");
            }
            else if (bmi < 24.9) {
               pw.println("<h1>"+"You have a normal weight"+" "+ bmi+"</h1>");
            }
            else if (bmi < 29.9) {
               pw.println("<h1>"+"You are overweight"+" "+ bmi+"</h1>");
            }
            else if(bmi > 40){
               pw.println("<h1>"+"You are obese"+" "+ bmi+"</h1>");
            }
            else {
```

```
pw.println("<h1>"+"Invalid"+"</h1>");
}

request.setAttribute("bmi", String.format("%.2f", bmi));
}
```





You have a normal weight 23.43749999999996