

Lab. 5 : Write a servlet application for implementing student grading system. In this system on first page student will enter his data (name, id and department).By clicking on next button he will be redirected to another page. On the second page he will enter marks of all 6 subjects. By clicking on "Generate result" he will be redirected to next page. On this page all information of student will be displayed along with the result pass or fail in appropriate colour. Also display the name of student on each page he visits. (Use session management).

Index.html

```
<!DOCTYPE html>
```

```
<!--
```

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Click nbfs://nbhost/SystemFileSystem/Templates/JSP_Servlet/Html.html to edit this template

```
-->
```

```
<html>
```

```
  <head>
```

```
    <title>Lab-5</title>
```

```
    <meta charset="UTF-8">
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  </head>
```

```
  <body>
```

```
    <form action="examInfo">
```

```
      <div>
```

```
        <input type="text" name="name" placeholder="Enter Name"><br>
```

```
        <input type="text" name="id" placeholder="Enter Id"><br>
```

```
        <input type="text" name="department" placeholder="Enter Department"><br>
```

```
        <input type="Submit" value="Next" name="btn_next">
```

```
      </div>
```

```
    </form>
```

```
  </body>
```

```
</html>
```

examInfo (Servlet)

```
/*  
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change  
this license  
 * Click nbfs://nbhost/SystemFileSystem/Templates/JSP_Servlet/Servlet.java to edit this  
template  
*/
```

```
import java.io.IOException;  
import java.io.PrintWriter;  
import javax.servlet.ServletException;  
import javax.servlet.annotation.WebServlet;  
import javax.servlet.http.Cookie;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;
```

```
@WebServlet(urlPatterns = {"/examInfo"})  
public class examInfo extends HttpServlet {
```

```
    protected void processRequest(HttpServletRequest request, HttpServletResponse  
response)
```

```
        throws ServletException, IOException {  
        response.setContentType("text/html;charset=UTF-8");
```

```
        String nm,id,department;
```

```
        try (PrintWriter out = response.getWriter()) {
```

```
            nm= request.getParameter("name");
```

```
            id= request.getParameter("id");
```

```
            department= request.getParameter("department");
```

```
            Cookie c1,c2,c3;
```

```
            c1 = new Cookie("nm",nm);
```

```

c2 = new Cookie("id",id);

c3 = new Cookie("dept",department);


response.addCookie(c1);
response.addCookie(c2);
response.addCookie(c3);


out.println("<!DOCTYPE html>");
out.println("<html>");
out.println("<head>");
out.println("<title>ExamInfo</title>");
out.println("</head>");
out.println("<body><form action=\"examResult\">");
out.println("<h1>Student : " + nm + "</h1><br><hr>");
out.println("<center><b>Enter ,marks for six subjects [out of 100]</b></center><br>");
out.println("Enter marks for subject1 <input type=\"text\" name=\"subj1\"><br><br>");
out.println("Enter marks for subject2 <input type=\"text\" name=\"subj2\"><br><br>");
out.println("Enter marks for subject3 <input type=\"text\" name=\"subj3\"><br><br>");
out.println("Enter marks for subject4 <input type=\"text\" name=\"subj4\"><br><br>");
out.println("Enter marks for subject5 <input type=\"text\" name=\"subj5\"><br><br>");
out.println("Enter marks for subject6 <input type=\"text\" name=\"subj6\"><br><br>");
out.println("<input type=\"Submit\" value=\"Generate Result\">");
out.println("</form></body>");
out.println("</html>");
}
}

```

```

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
} // </editor-fold>

}

```

examResult (Servlet)

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

```

```

@WebServlet(urlPatterns = {"/examResult"})

public class examResult extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse
response)

        throws ServletException, IOException {
response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter()) {
    /* TODO output your page here. You may use following sample code. */

    int m1,m2,m3,m4,m5,m6;

    float avg;

    m1 = Integer.parseInt(request.getParameter("subj1"));

        m2 = Integer.parseInt(request.getParameter("subj2"));

            m3 = Integer.parseInt(request.getParameter("subj3"));

                m4 = Integer.parseInt(request.getParameter("subj4"));

                    m5 = Integer.parseInt(request.getParameter("subj5"));

                        m6 = Integer.parseInt(request.getParameter("subj6"));

                            avg=(float) (m1+m2+m3+m4+m5+m6)/6;

                                char grade;

                                    if(avg >= 90)

                                        {

                                            grade = 'A';

                                        }

                                    else if(avg >= 70)

                                        {

                                            grade='B';

                                        }

                                    else if (avg >= 60)

                                        {

                                            grade = 'C';

                                        }

                                }

                            }

                        }

                    }

                }

            }

        }

    }
}

```

```

        }
        else
        {
            grade = 'F';
        }
    }

    Cookie []c= request.getCookies();

    out.println("<br>Name :"+c[0].getValue());
    out.println("<br>Id :"+c[1].getValue());
    out.println("<br>Department :"+c[2].getValue());


    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>ExamResult</title>");
    out.println("</head>");
    out.println("<body>");
    out.println("<h1>Exam Result :"+grade+"</h1>");
    out.println("</body>");
    out.println("</html>");
}
}

```

@Override

```

protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

```

@Override

```

protected void doPost(HttpServletRequest request, HttpServletResponse response)

```

```
        throws ServletException, IOException {  
    processRequest(request, response);  
}  
@Override  
    public String getServletInfo() {  
        return "Short description";  
    }  
} // </editor-fold>
```