Advanced Java Lab

Week-4

Roll Number: 248W5A1213

1. Create a basic servlet and deploy using web.xml.

Code:

```java
package com.mycompany.servlets;


import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;


public class HelloServlet extends HttpServlet {


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


        response.setContentType("text/html");

        PrintWriter out = response.getWriter();


        out.println("<h2>Hello from Basic Servlet!</h2>");

        out.println("<p>This servlet is mapped using web.xml</p>");
    }
}
```
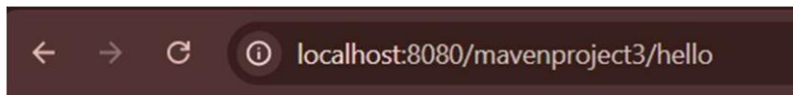
Output:

Hello from Basic Servlet!

This servlet is mapped using web.xml

2. Demonstrate ServletContext and ServletConfig usage.

Code:

```java
package com.mycompany.servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;

import javax.servlet.http.*;

public class InfoServlet extends HttpServlet {

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

    response.setContentType("text/html");
    PrintWriter out = response.getWriter();

    // ServletConfig example
    ServletConfig config = getServletConfig();
    String developerName = config.getInitParameter("developer");

    // ServletContext example
    ServletContext context = getServletContext();
    String appName = context.getInitParameter("appName");

    out.println("<h2>ServletConfig & ServletContext Demo</h2>");
    out.println("<p><b>Developer:</b> " + developerName + "</p>");
    out.println("<p><b>Application Name:</b> " + appName + "</p>");
    out.println("<p><b>Server Info:</b> " + context.getServerInfo() + "</p>");
  }
}
```
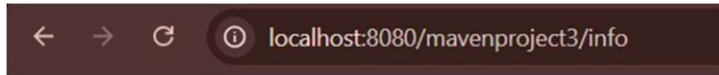
Output:

localhost:8080/mavenproject3/info

ServletConfig & ServletContext Demo

Developer: Bharath

Application Name: My Web Application

Server Info: Apache Tomcat/9.0.112