ASHWADH A

231501022

AIML 'A'

LAB EXPERIMENT -3

LAB EXPERIMENT : 03

Write a Servlet program that prints &quot;Hello, World!&quot; when accessed through a browser.

Aim:

To write a simple Servlet program in Java that prints "Hello, World!" when accessed through a browser.

Algorithm:

1. Set up the Servlet Environment:
   * Install a Servlet container like Apache Tomcat.
   * Set up the Java Development Kit (JDK) and Java Enterprise Edition (JEE) to compile and run the Servlet.
2. Create a Java Servlet Class:
   * Create a class that extends HttpServlet.
   * Override the doGet() method to respond to HTTP GET requests.
   * Inside the doGet() method, use PrintWriter to send the response "Hello, World!" back to the browser.
3. Configure the Servlet in web.xml:
   * Add a <servlet> entry and <servlet-mapping> entry in the web.xml file to map the Servlet class to a URL.
4. Deploy and Test the Servlet:
   * Deploy the Servlet in the Tomcat server.
   * Access the URL of the servlet through a

browser to see the output "Hello, World!".

Code :

Java Servlet Code:

import java.io.\*; import javax.servlet.\*;

import javax.servlet.http.\*;

public class HelloWorldServlet extends HttpServlet {

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws

ServletException, IOException {

// Set the content type of the response to text/html response.setContentType("text/html");

// Get the PrintWriter object to send response PrintWriter out = response.getWriter();

// Write the HTML content in the response out.println("<html><body>");

out.println("<h1>Hello, World!</h1>"); out.println("</body></html>");

}

}

web.xml Configuration:

<web-app xmlns="<http://java.sun.com/xml/ns/javaee>"

xmlns:xsi="<http://www.w3.org/2001/XMLSchema-> instance"

xsi:schemaLocation="<http://java.sun.com/xml/ns/javaee>

[http://java.sun.com/xml/ns/javaee/web-app\_3\_1.xsd"](http://java.sun.com/xml/ns/javaee/web-app_3_1.xsd) version="3.1">

<servlet>

<servlet-name>HelloWorldServlet</servlet-name>

<servlet-class>HelloWorldServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>HelloWorldServlet</servlet-name>

<url-pattern>/hello</url-pattern>

</servlet-mapping>

</web-app>

Steps to Run the Servlet:

1. Set up the Environment:
   * Install Apache Tomcat or any other servlet container.
   * Configure the JDK and set up your IDE (e.g., Eclipse or IntelliJ IDEA) to support Java web development.
2. Compile the Servlet:
   * Save the HelloWorldServlet.java file in the appropriate directory.
   * Use the javac command to compile the Java file or let your IDE handle this for you.
3. Deploy the Servlet:
   * Place the compiled class in the WEB- INF/classes directory of your web application.
   * Make sure web.xml is placed in the WEB-INF folder.
4. Start Tomcat Server:
   * Start the Apache Tomcat server.
   * Open the browser and access the URL [http://localhost:8080/your-app/hello.](http://localhost:8080/your-app/hello)

OUTPUT:



RESULT :

The servlet successfully prints "Hello, World!" when accessed via the browser.

This demonstrates a basic Java Servlet and how it can be used to generate dynamic web content in response to user requests.