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HelloServlet Web Application using Tomcat Server

AIM:

Implement Hell World Simple Wen application using Tomcat Servlet Server.

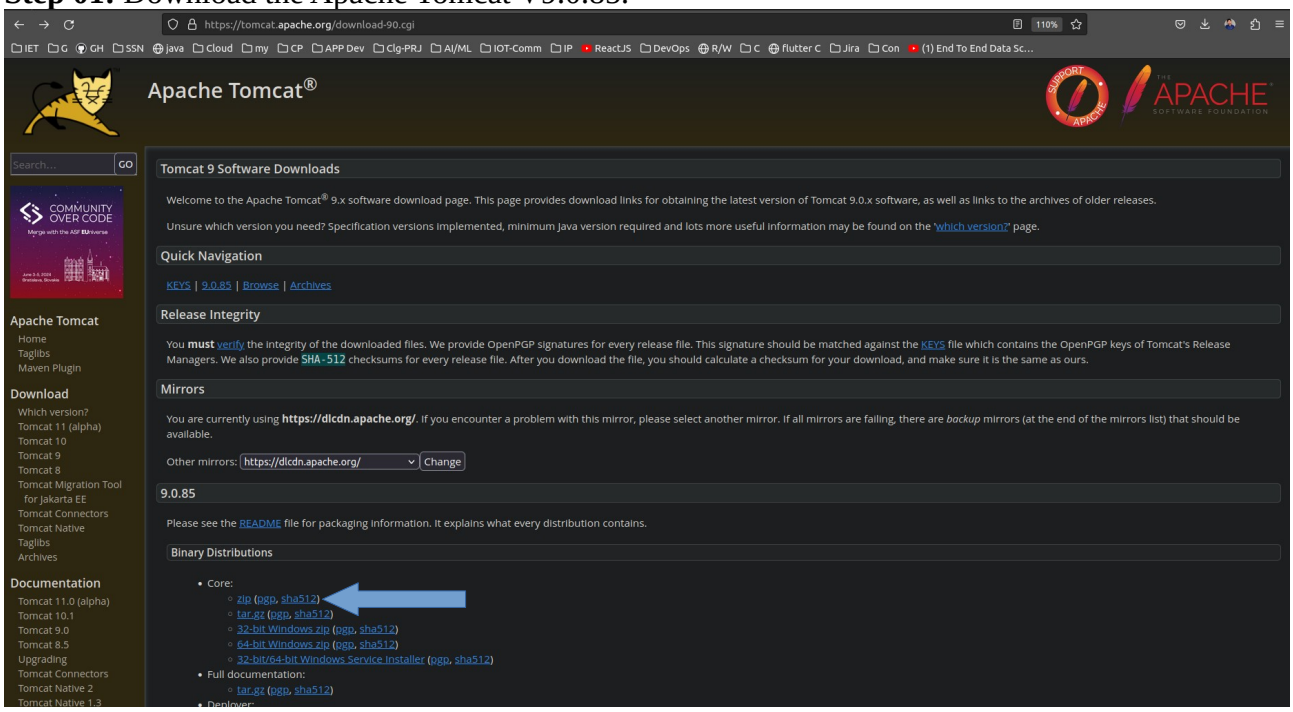
Project DIR:

webapps

- **HelloServlet**
  - index.html
  - **WEB-INF**
    - web.xml
    - **classes**
      - HelloWorld.java
      - HelloWorld.class

Procedure:

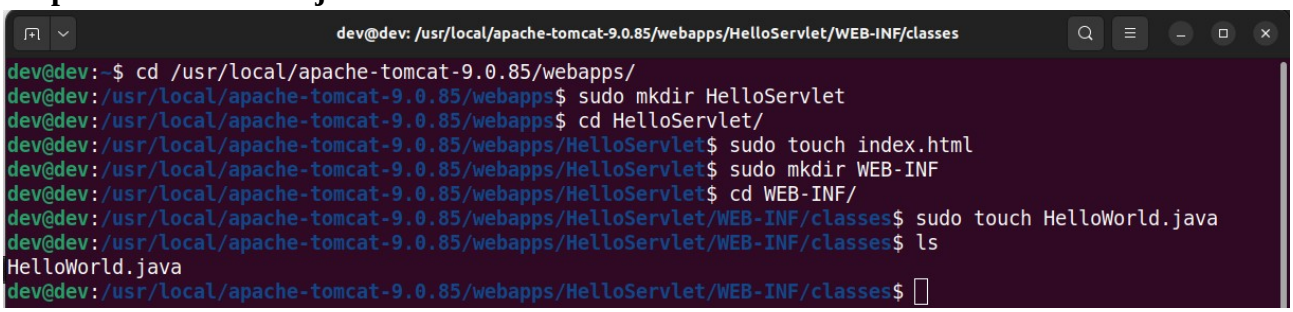
Step 01: Download the Apache Tomcat V9.0.85.



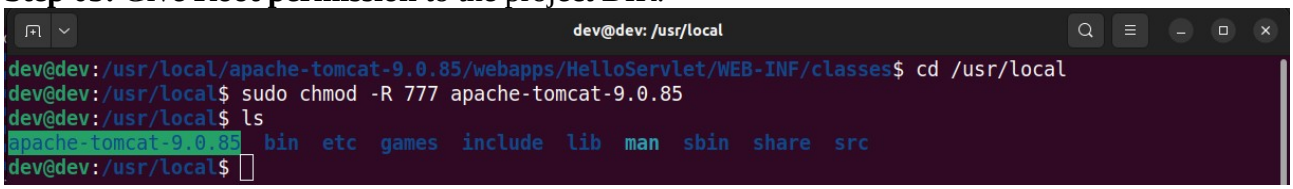
Step 02: Extract the .zip file.

Step 03: move the extracted folder to "**usr/local**".

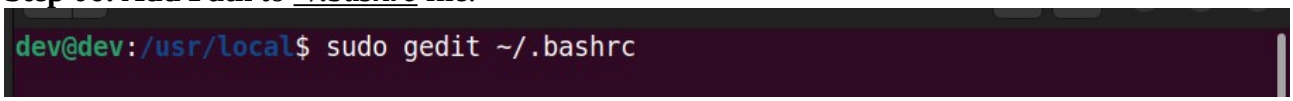
Step 04: Create the **Project DIR.**



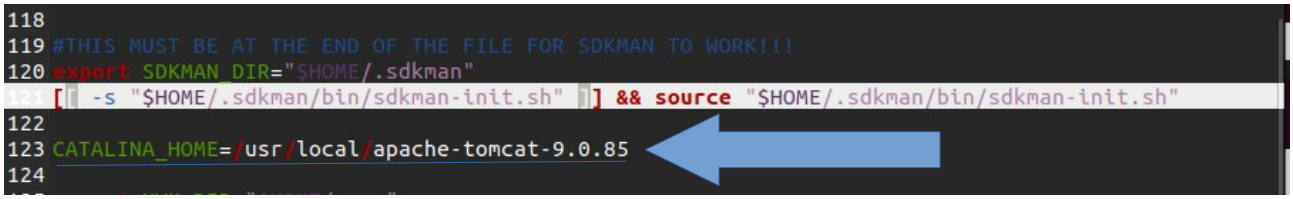
Step 05: Give **Root permission** to the project DIR.



Step 06: Add Path to ***~/.bashrc*** file.

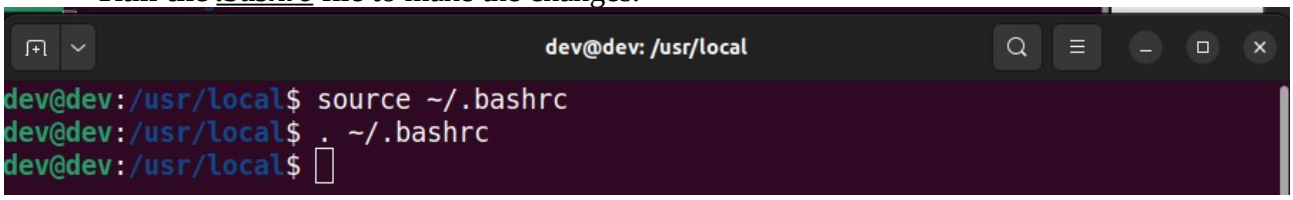


Go to last line and **Add the line.**

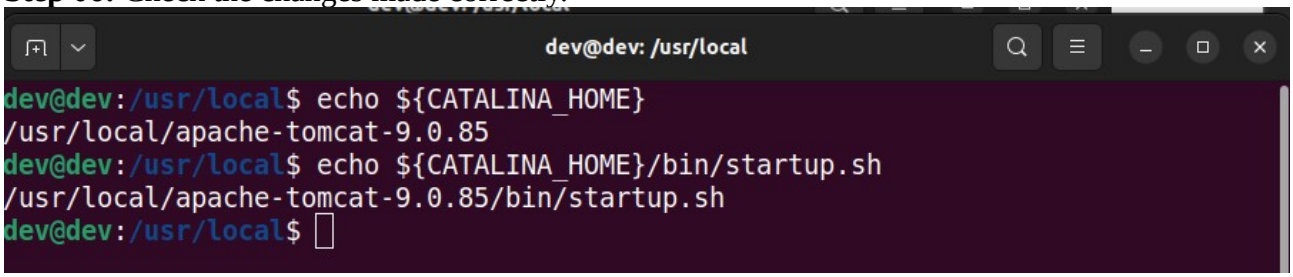


save and close the file.

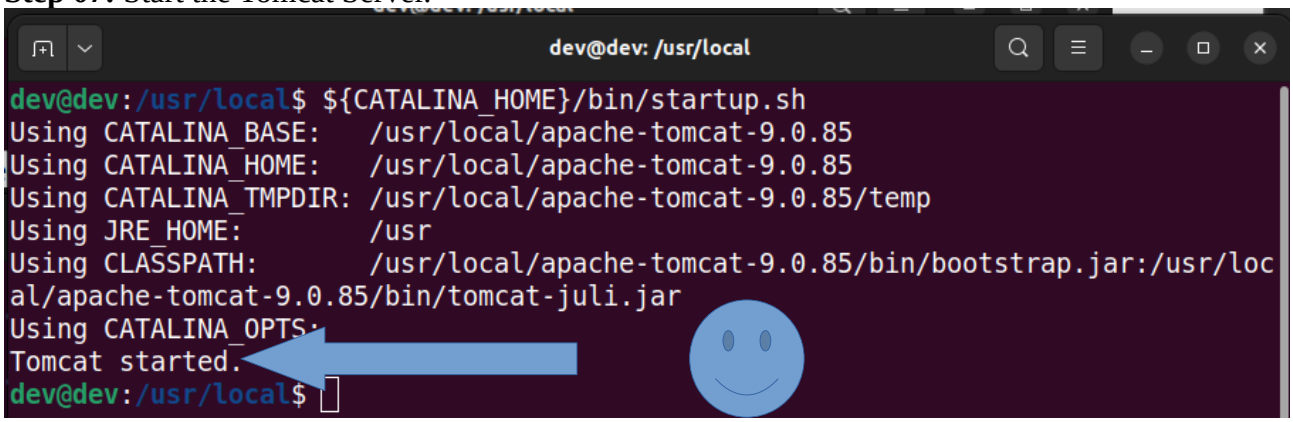
Run the *.bashrc* file to make the changes.



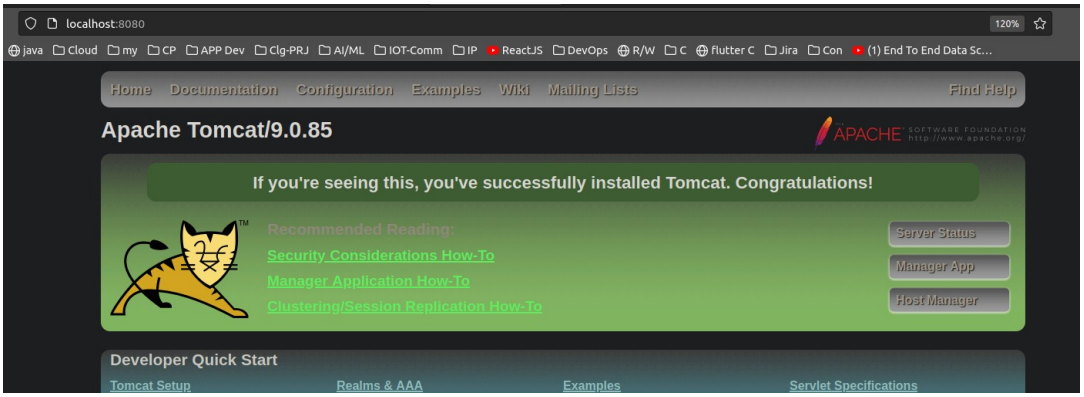
Step 06: Check the changes made correctly.



Step 07: Start the Tomcat Server.



Step 08: Go to Browser and Type **http://localhost:8080 .**



Step 09: Write the Code.

index.html

```
<html>
   <head>
      <title>My First Web Application</title>
   </head>
   <body>
      <form action="hello" method="get">
      <button type="submit">Click Me</button>
   </form>
   </body>
</html>
```

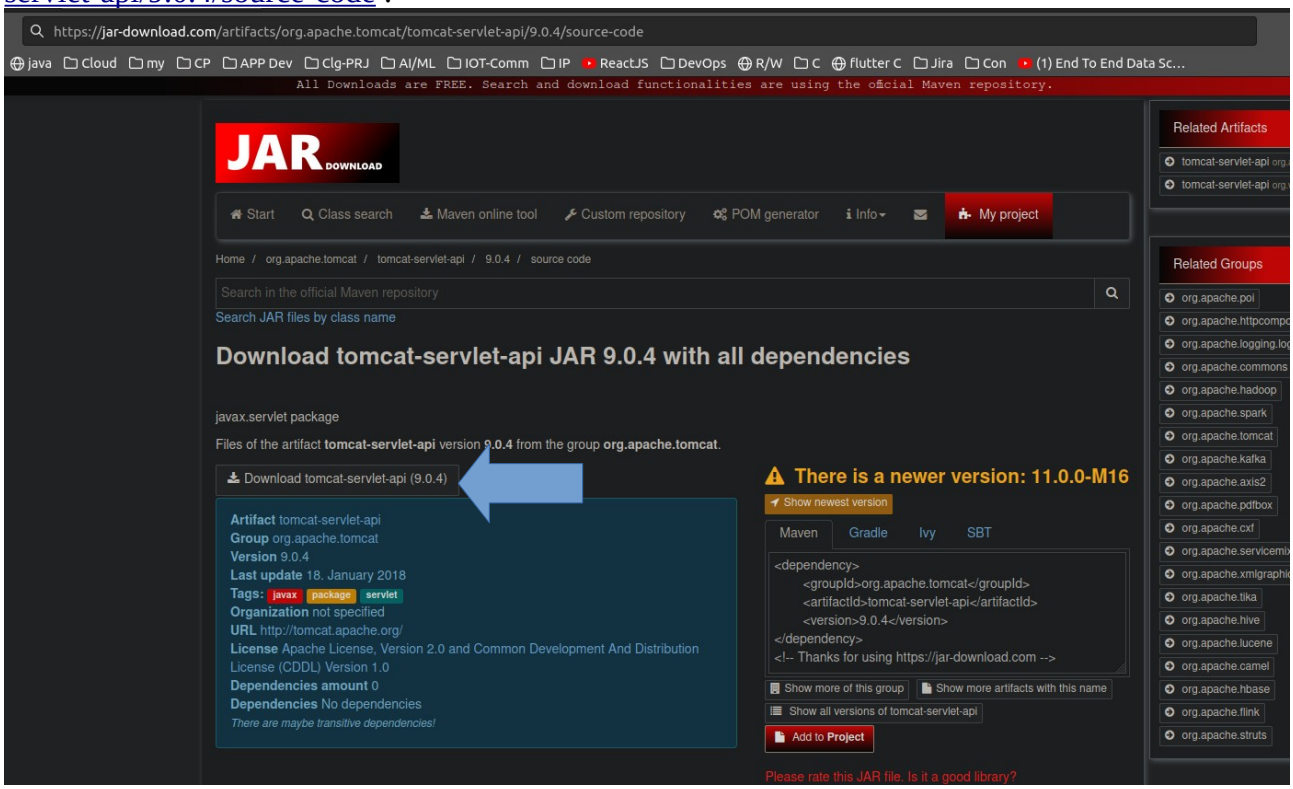
web.xml

```
<web-app>
   <servlet>
      <servlet-name>HelloWorld</servlet-name>
      <servlet-class>HelloWorld</servlet-class>
   </servlet>
   <servlet-mapping>
      <servlet-name>HelloWorld</servlet-name>
      <url-pattern>/hello</url-pattern>
   </servlet-mapping>
   <welcome-file-list>
      <welcome-file>index.html</welcome-file>
   </welcome-file-list>
</web-app>
```

HelloWorld.java

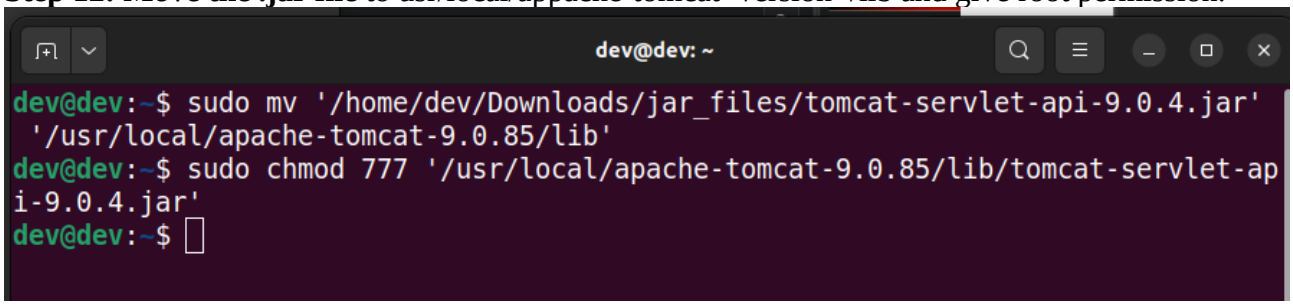
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class HelloWorld extends HttpServlet {

   public void doGet(HttpServletRequest request, HttpServletResponse response)
         throws IOException, ServletException {
      response.setContentType("text/html");
      PrintWriter out = response.getWriter();
      out.println("<html>");
      out.println("<head>");
      out.println("<title>Hello World!</title>");
      out.println("</head>");
      out.println("<body>");
      out.println("<h1>Hello World!</h1>");
      out.println("</body>");
      out.println("</html>");
   }
}
```

Step 10: Download the **Servlet API** https://jar-download.com/artifacts/org.apache.tomcat/tomcat-servlet-api/9.0.4/source-code .

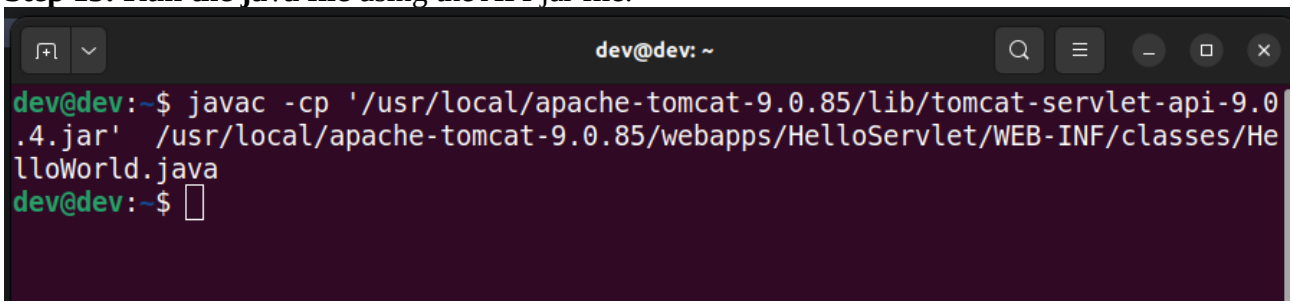


Step 11: Extract the file.

Step 12: Move the .jar file to usr/local/appache-tomcat<version>/lib and give root permission.



Step 13: Run the java file using the API jar file.



Step 14: Open the Browser and locate to **http://localhost:8080/HelloServlet/**

Learning Outcome:

1. Understand the the working of an Web Server and the protocol in real time.
2. Developed a simple Client Server application.
3. Understand the underline of Web Application.