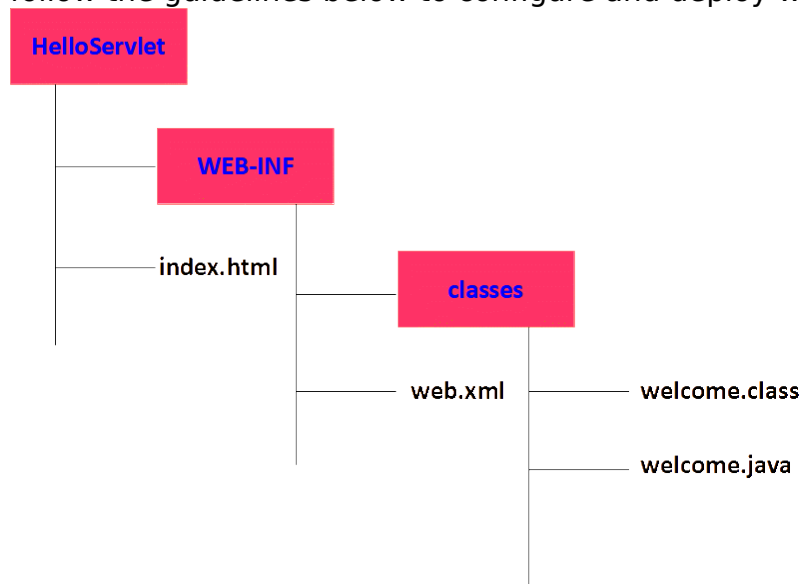# HelloServlet Application

Write index.html to display form with a submit button. Set the method attribute of the form to "get" to generate GET request to the server. Write a java servlet to display welcome message when the button is clicked. Write also the configuration file, namely, web.xml which maps the url mapped to the servlet class file.
Follow the directory structure for creating HelloServlet Web application and follow the guidelines below to configure and deploy web application.

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

</web-app>

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

public class HelloServlet 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>");
}
}
```

HelloWorldApp Folder is created under webapps folder in Tomcat
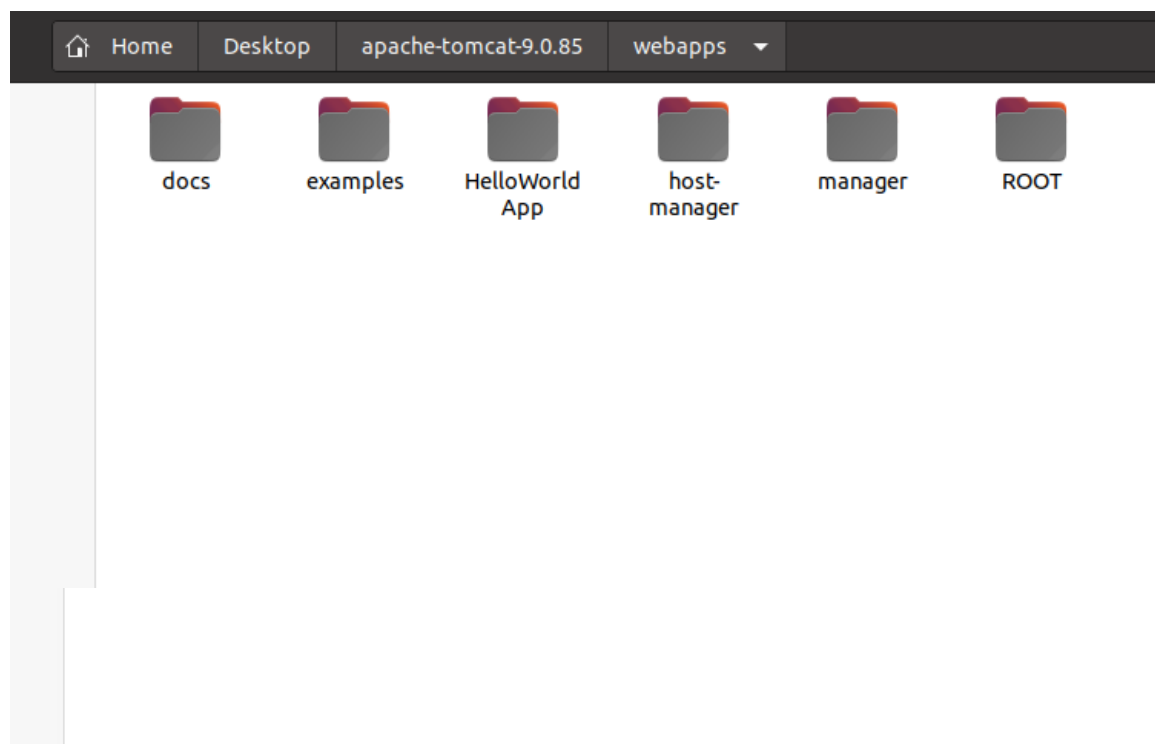
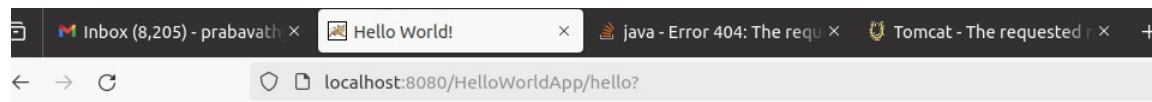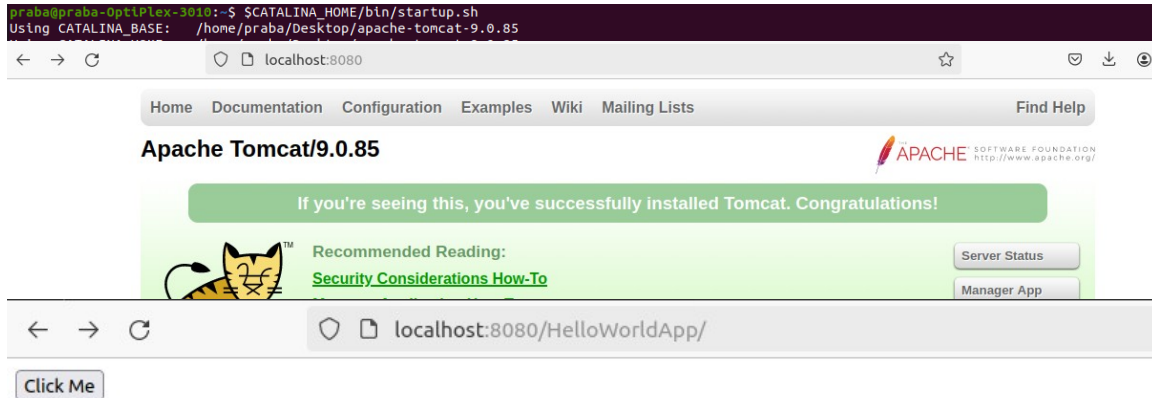Compilation
javac HelloWorld.java
Need to store tomcat-servlet-api-9.0.4.jar in Tomcat server folder

Command to run java file

javac -classpath "/home/praba/Desktop/apache-tomcat-9.0.85/lib/tomcat-servlet-api-9.0.4.jar" HelloServlet.java

To run firstservlet navigate to the url : http://localhost:8080/HelloWorldApp

HelloServlet Application

Index.html
```
<html>
<head>
<title>Authentication Web Application</title>
</head>
<body>
<form action="hello" method="post">
<Label>User Name: <input type="text" name="uname"></label>
<Label>Password: <input type="text" name="password"></label>
<button type="submit">Click Me</button>
</form>
```

```html
</body>
</html>
```

Web.xml

```xml
<web-app>

<servlet>
<servlet-name>DatabaseServlet</servlet-name>
<servlet-class>DatabaseServlet</servlet-class>
</servlet>

<servlet-mapping>
<servlet-name>DatabaseServlet</servlet-name>
<url-pattern>/hello</url-pattern>
</servlet-mapping>

<welcome-file-list>
    <welcome-file>index.html</welcome-file>
</welcome-file-list>

</web-app>
```

DatabaseServlet.java

```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.PreparedStatement;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;


public class DatabaseServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
               throws ServletException, IOException
{
try{
      Class.forName("com.mysql.jdbc.Driver");
      Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/student"," "," ");

      Statement stmt=con.createStatement();
      ResultSet rs=stmt.executeQuery("select * from emp");
      while(rs.next())
      {
      if(request.getParameter("uname") == rs.getString(2))
      {
       PrintWriter out = response.getWriter();
          out.println("<html><body><b>Found"+"</b></body></html>");
```

```java
        }
        else
        {
         PrintWriter out = response.getWriter();
           out.println("<html><body><b>Not found"+"</b></body></html>");
        }
        con.close();
    }
    }
    catch(Exception e){System.out.println(e);}
    }
}
```