Name: Meet Chudasama

TY-IT Roll No. 70

Assignment 2

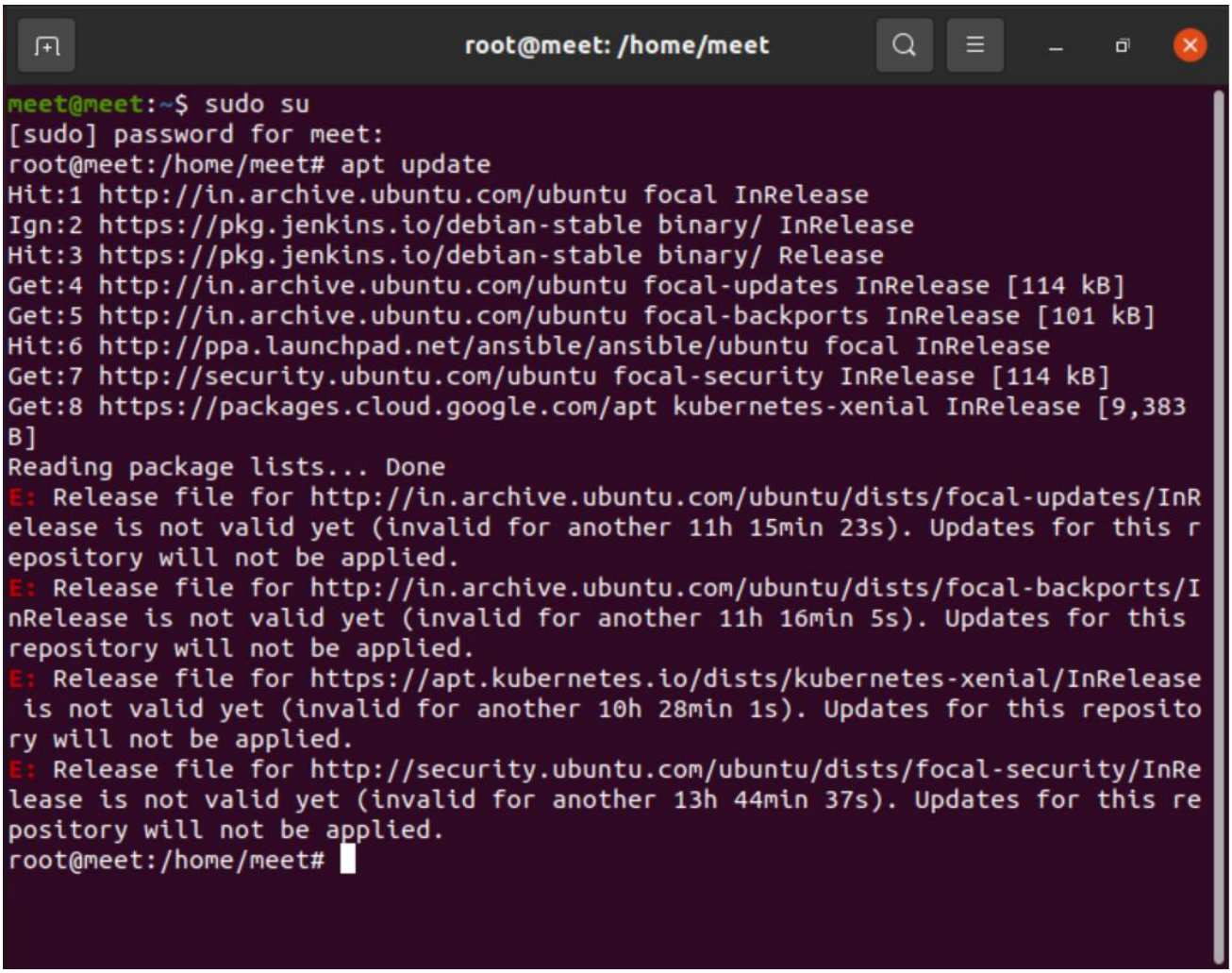
Host an application on Apache Tomcat Server using Jenkins pipeline.

Steps and Outputs:

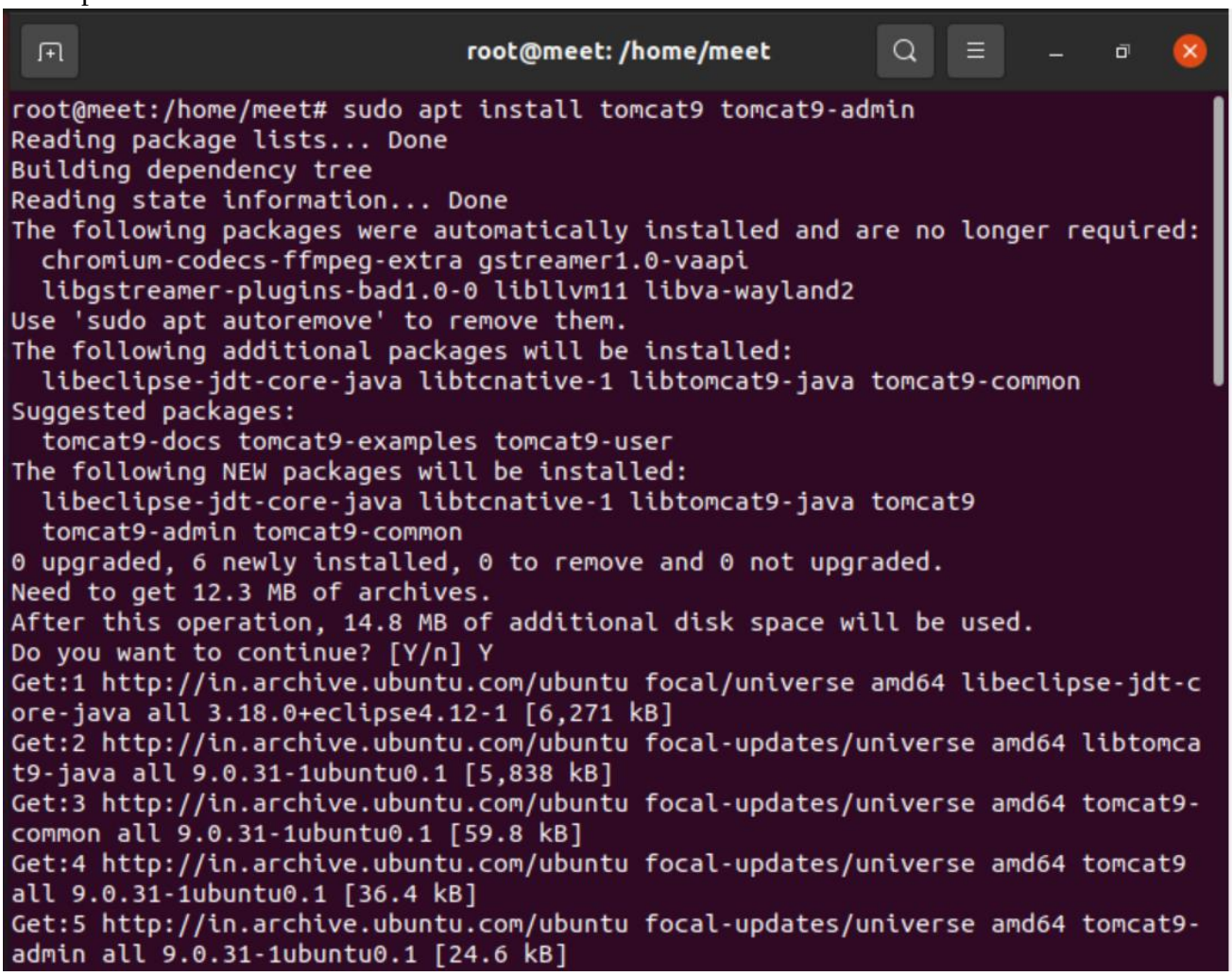
Step 1: Run the following for installation of Tomcat Server:

sudo apt update

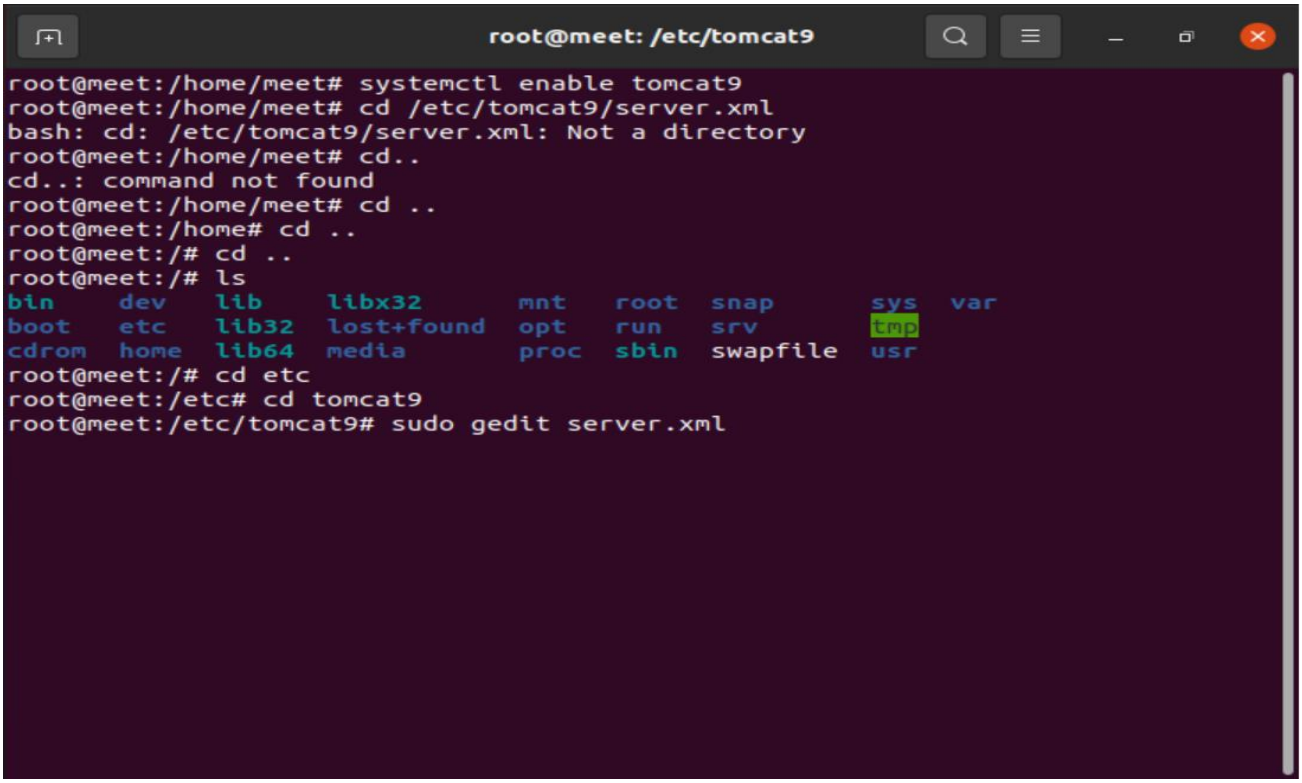
sudo apt-cache search tomcat



sudo apt install tomcat9 tomcat9-admin

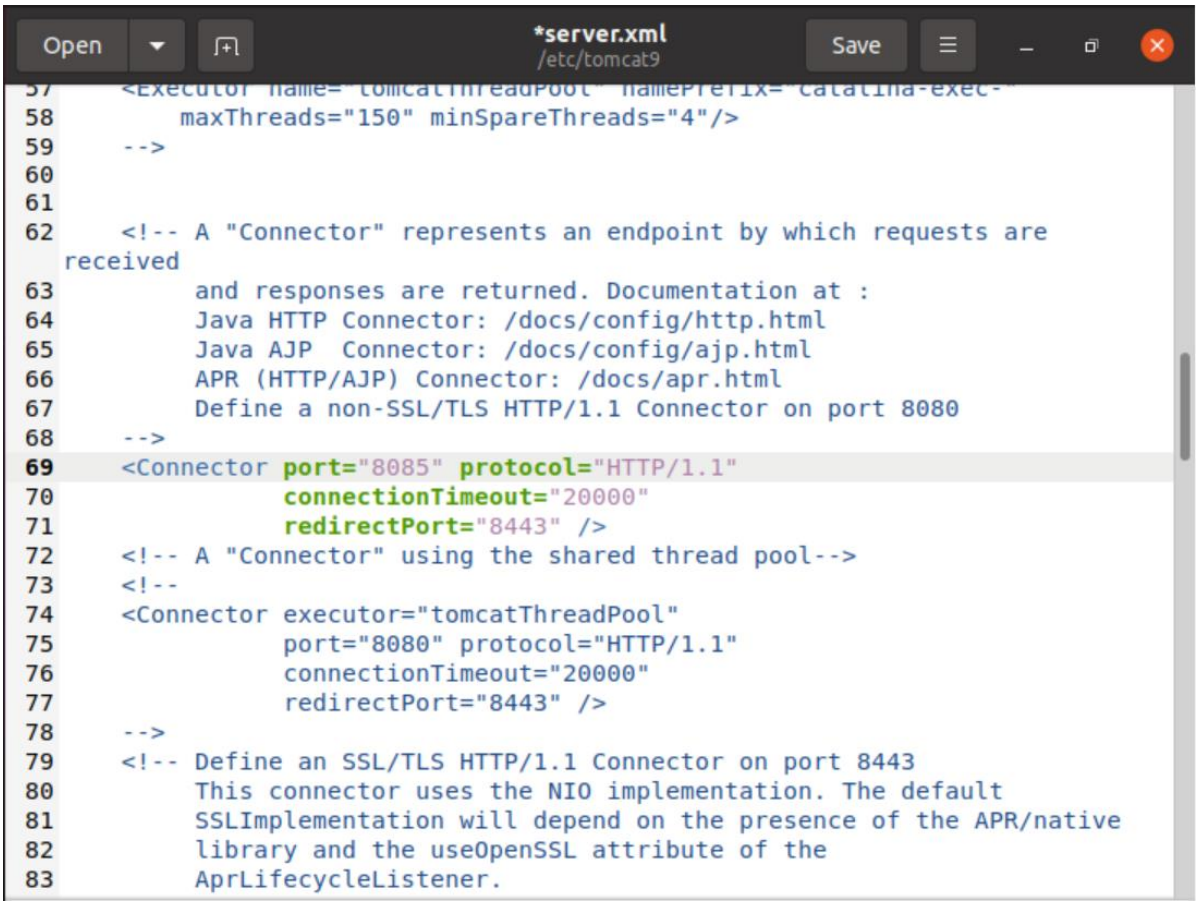


sudo systemctl enable tomcat9

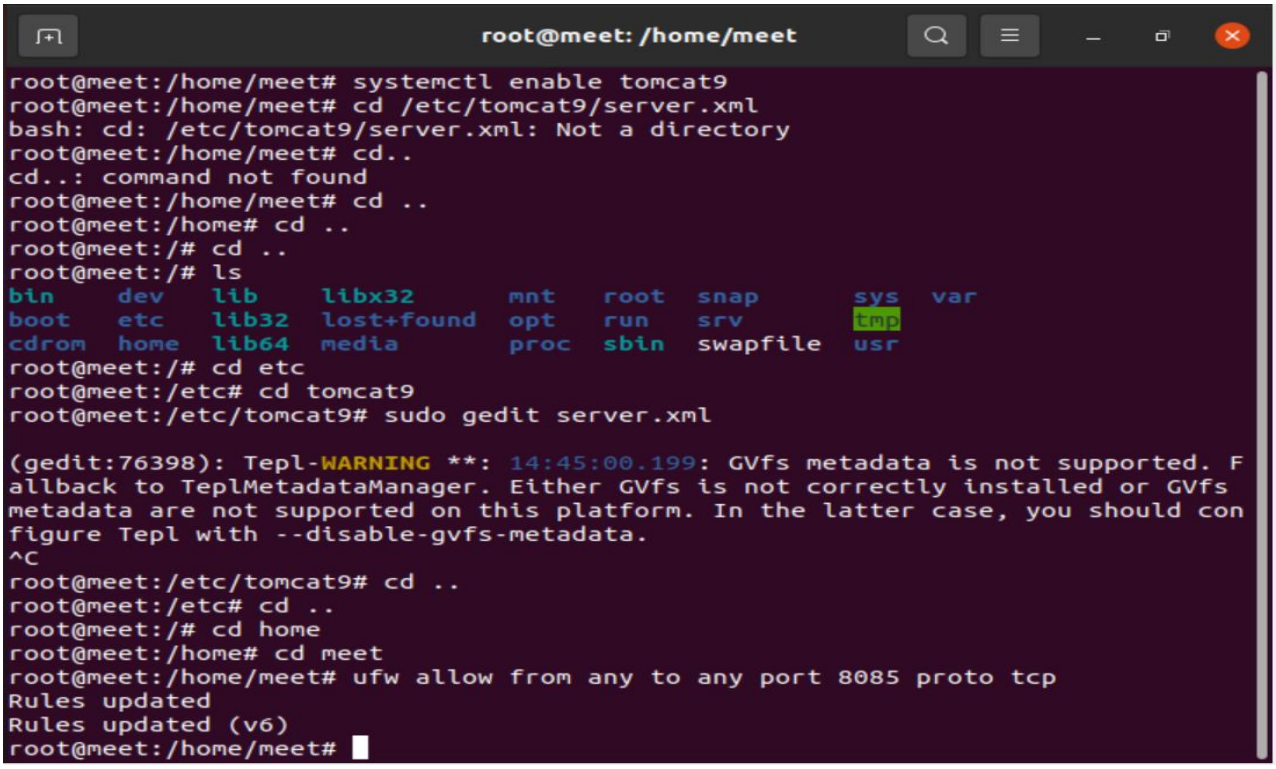


Step 2: Go to /etc/tomcat9 and edit server.xml:

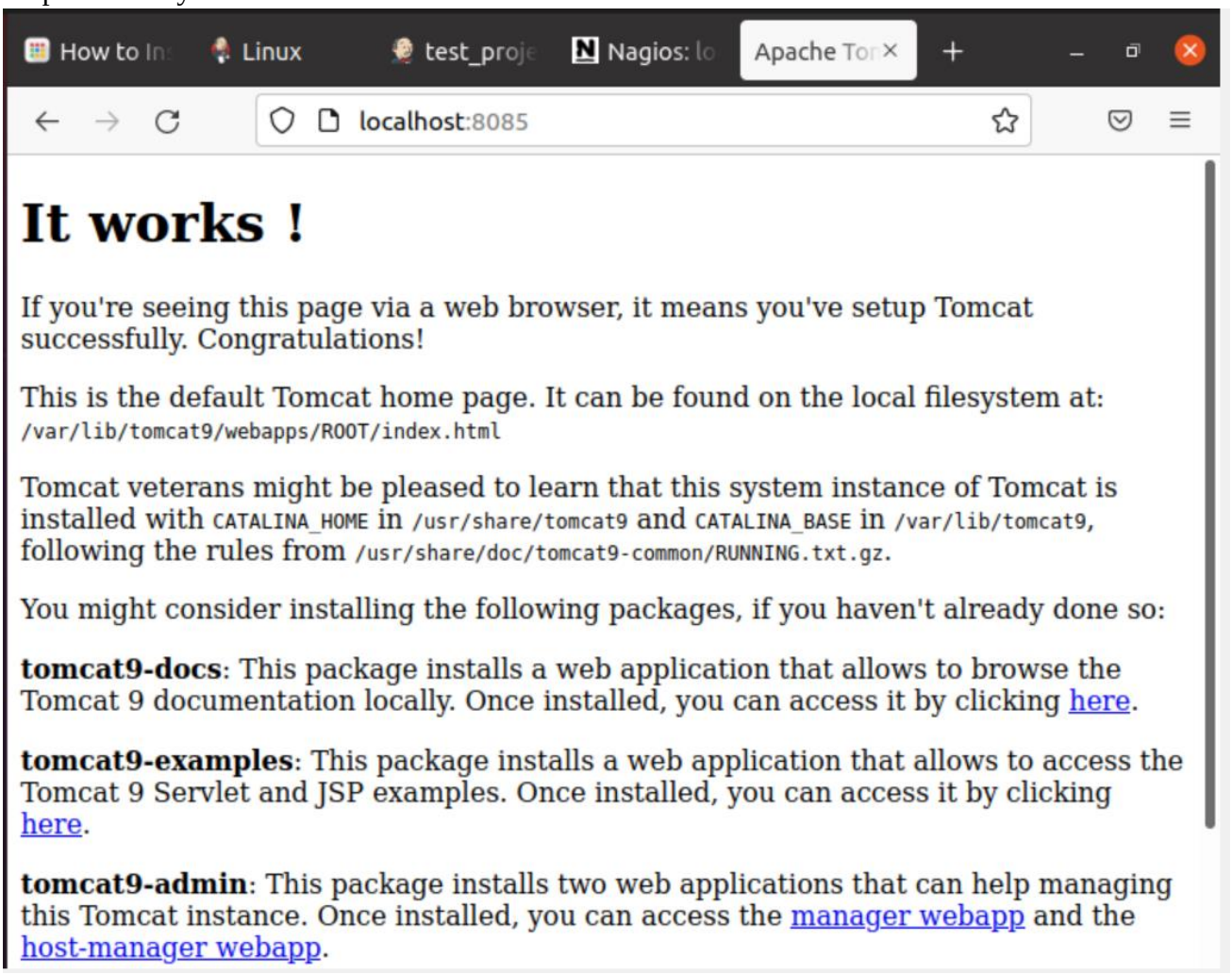
Set the port to 8085 as we are using 8080 for Jenkins:



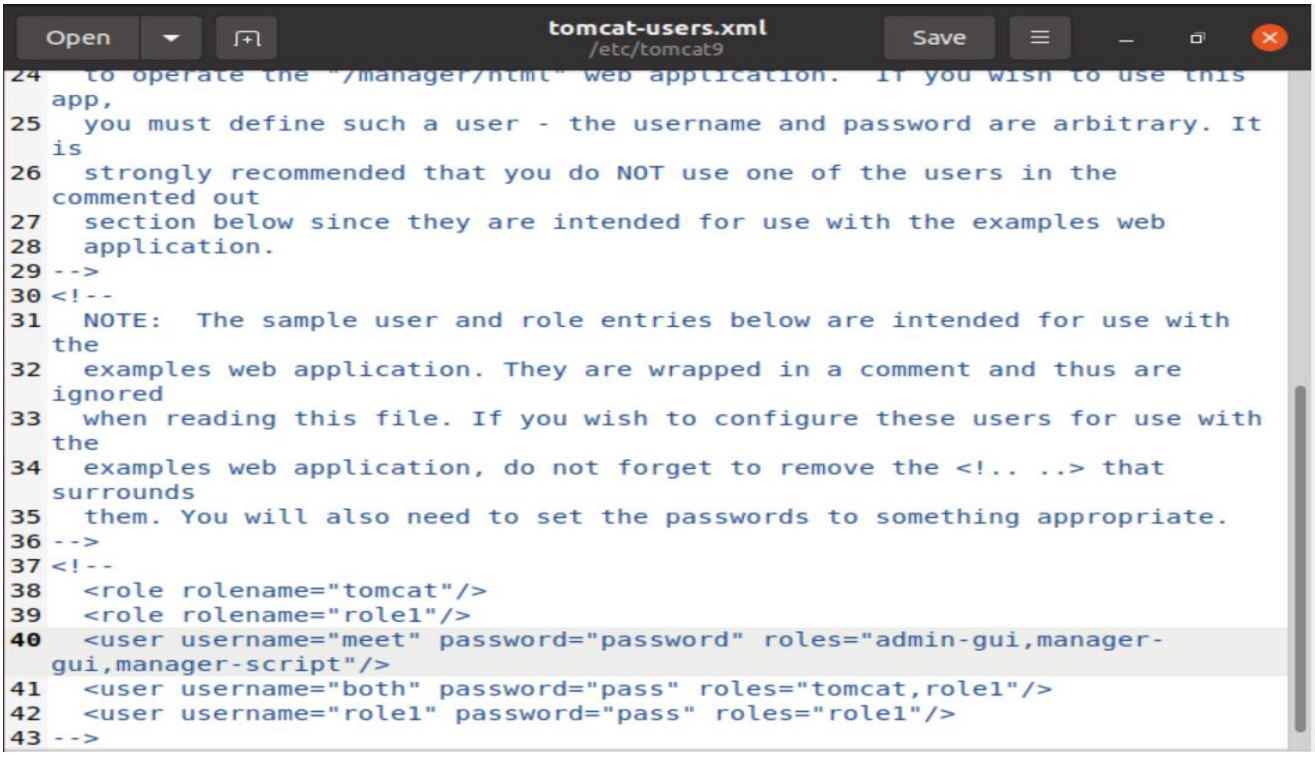
Step 3: Run sudo ufw allow from any to any port 8085 proto tcp.



Step 4: Sudo systemctl start tomcat9



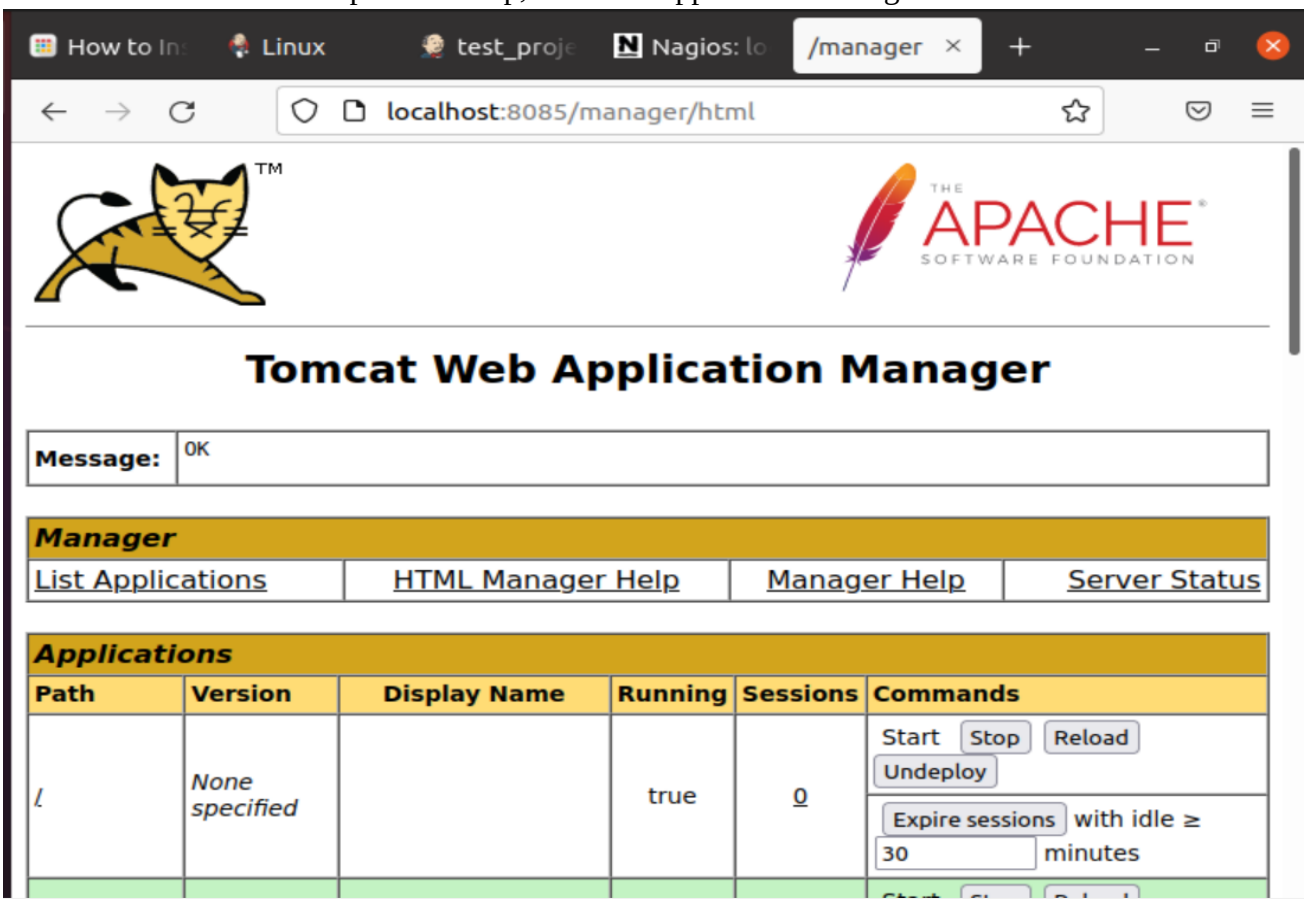
Step 5: Now edit the tomcat-users.xml in /etc/tomcat folder:



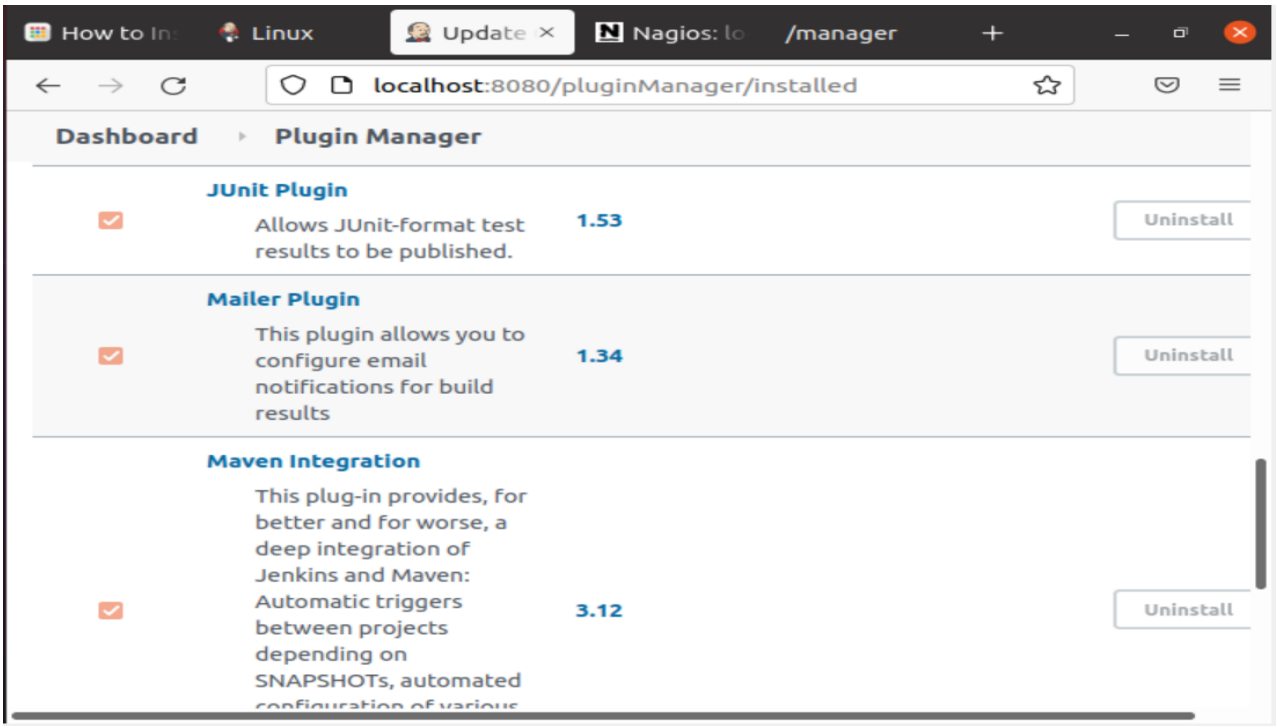
Step 6: Now run sudo systemctl restart tomcat9

And go to: localhost/8085/manager/html

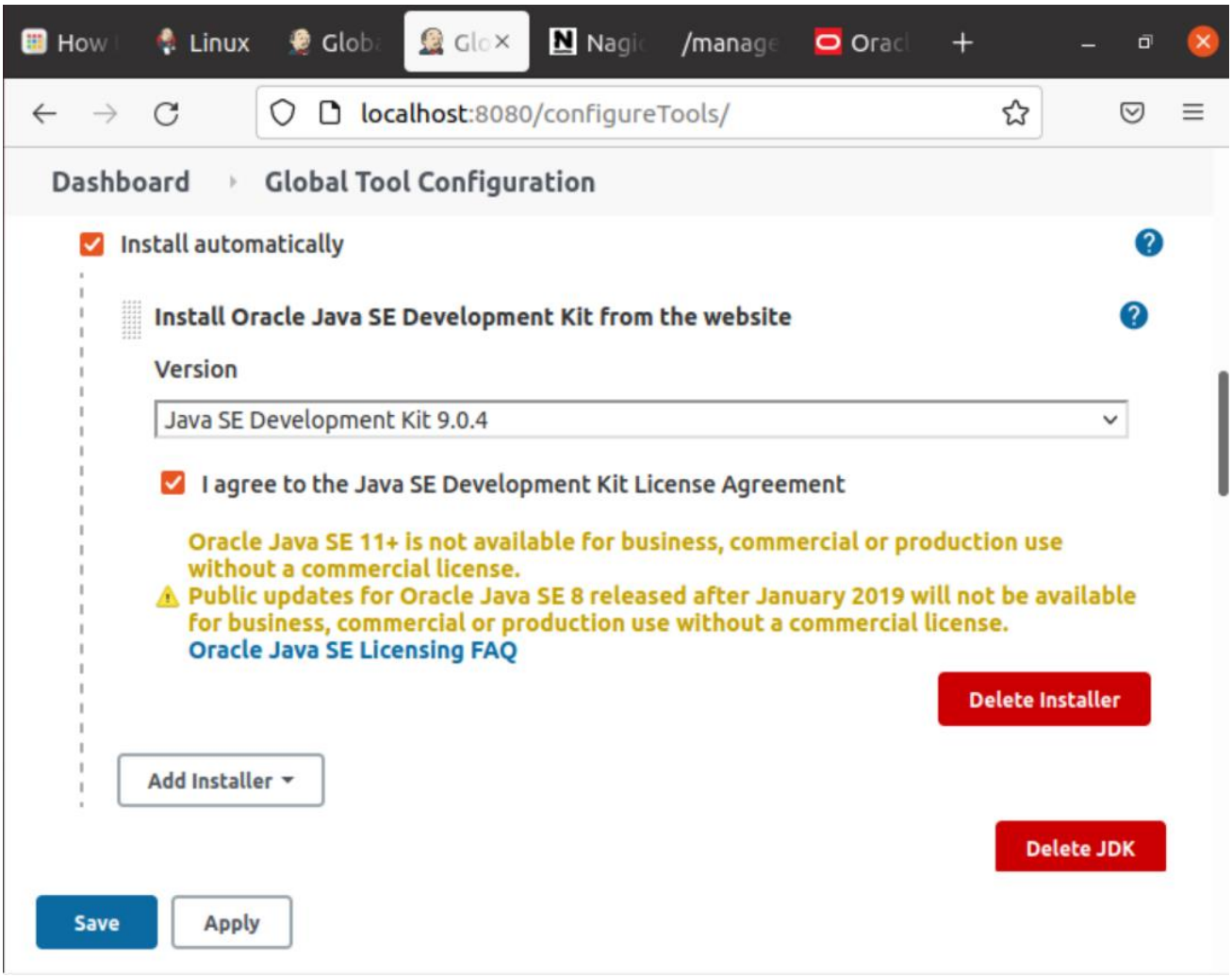
Enter the credentials set in previous step, and then Application Manager can be seen:



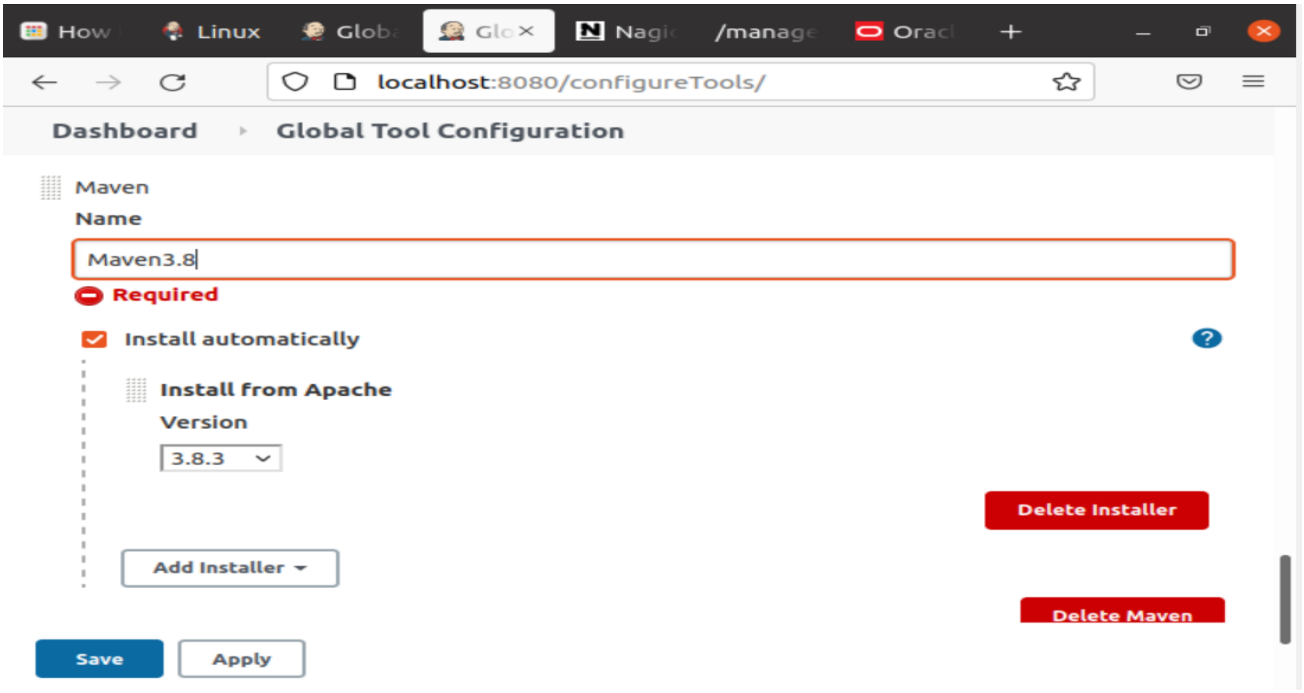
Step 7: Go to Jenkins Dashboard > Manage Jenkins > Manage Plugins and search for the plugins: “Deploy to Container”, “Maven Integration”, “JUnit” and install them.



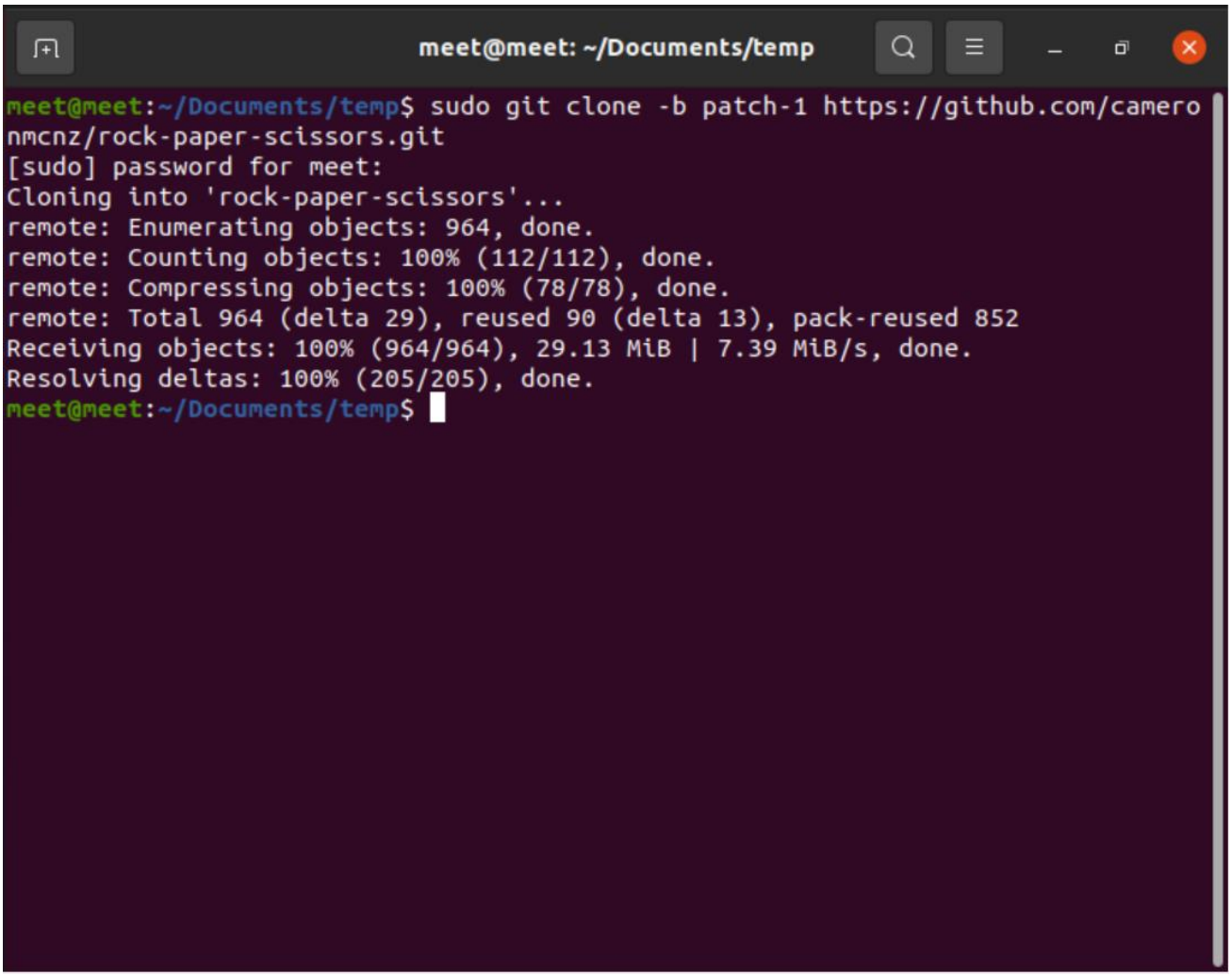
Step 8.1: From the Dashboard, go to the Configure System > Global Tool Configuration and click on add JDK and enter the name as JDK9 and check the License Agreement:

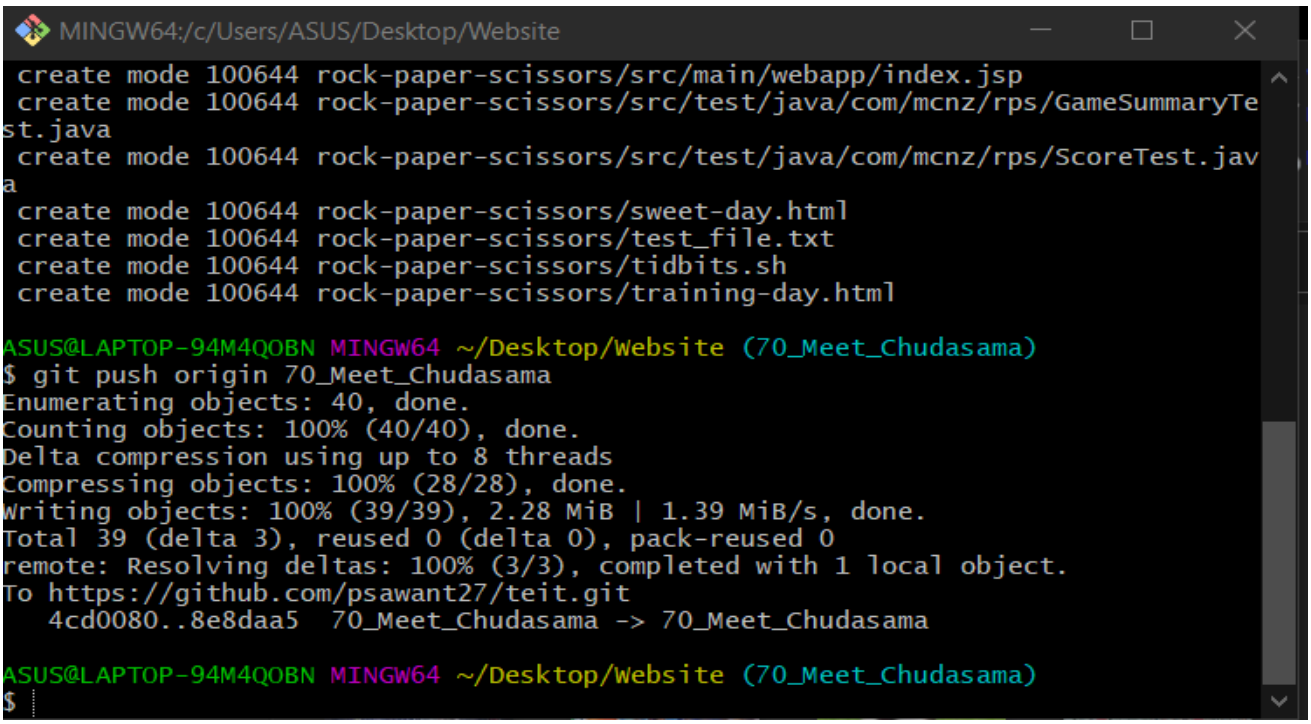


Step 8.2: Similarly, add Maven with name as Maven3.8:

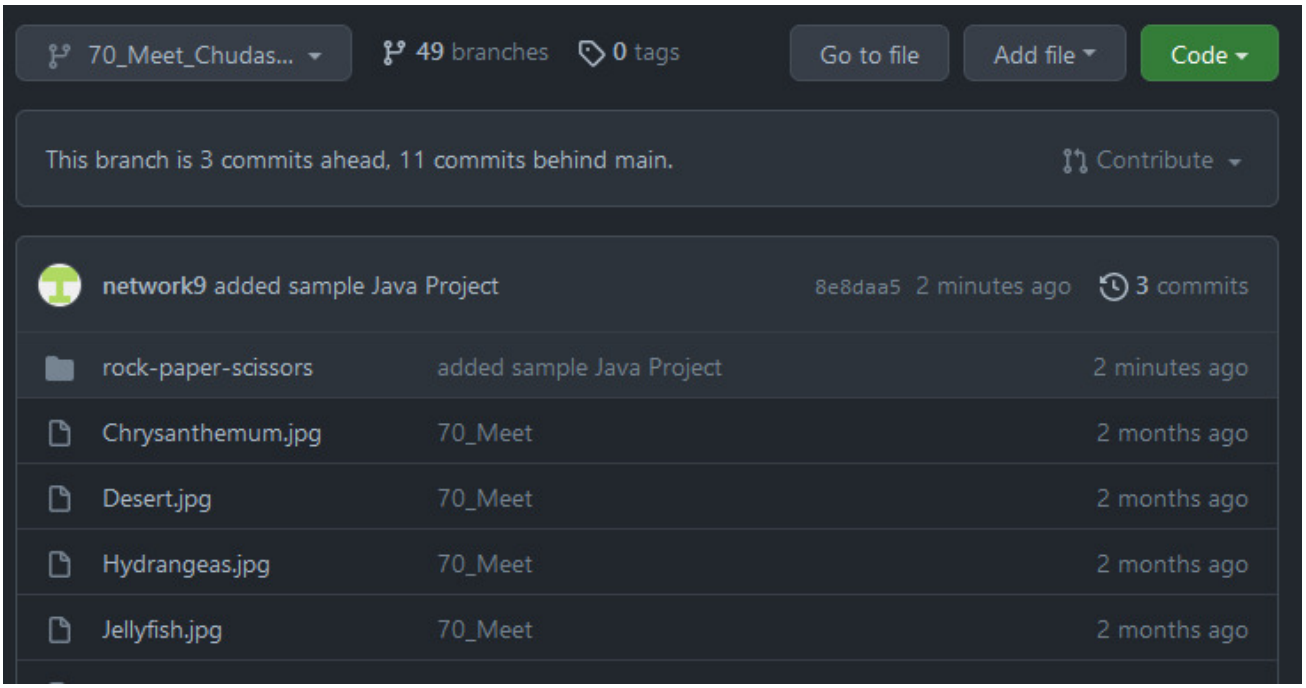


Step 9: Git clone an example java application and pushing it to the branch:

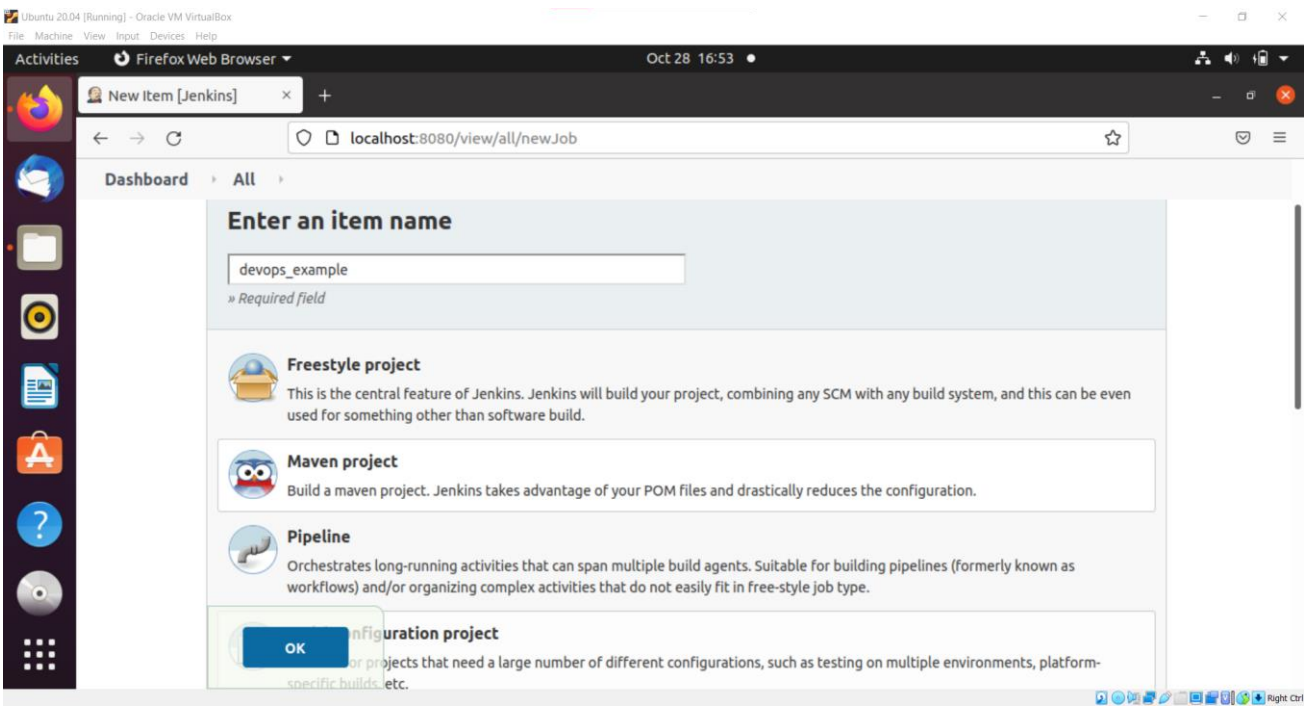




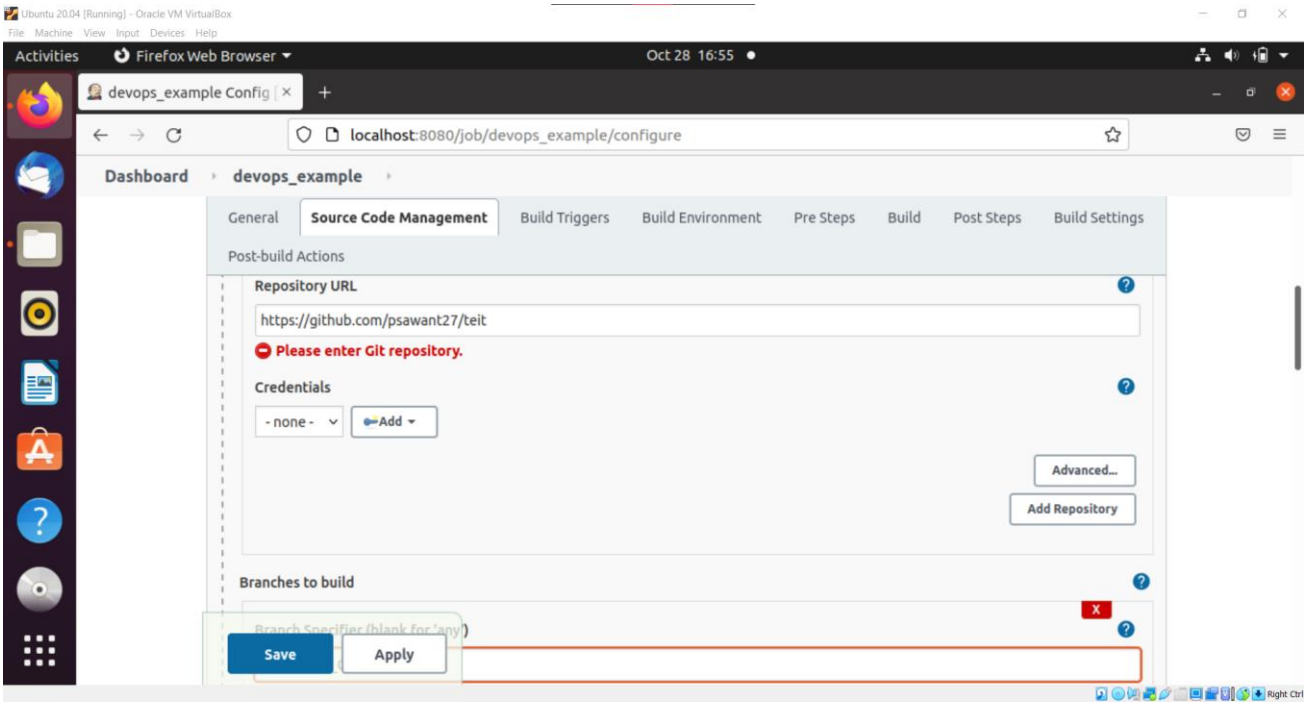
Added under tomcat-deploy-example:



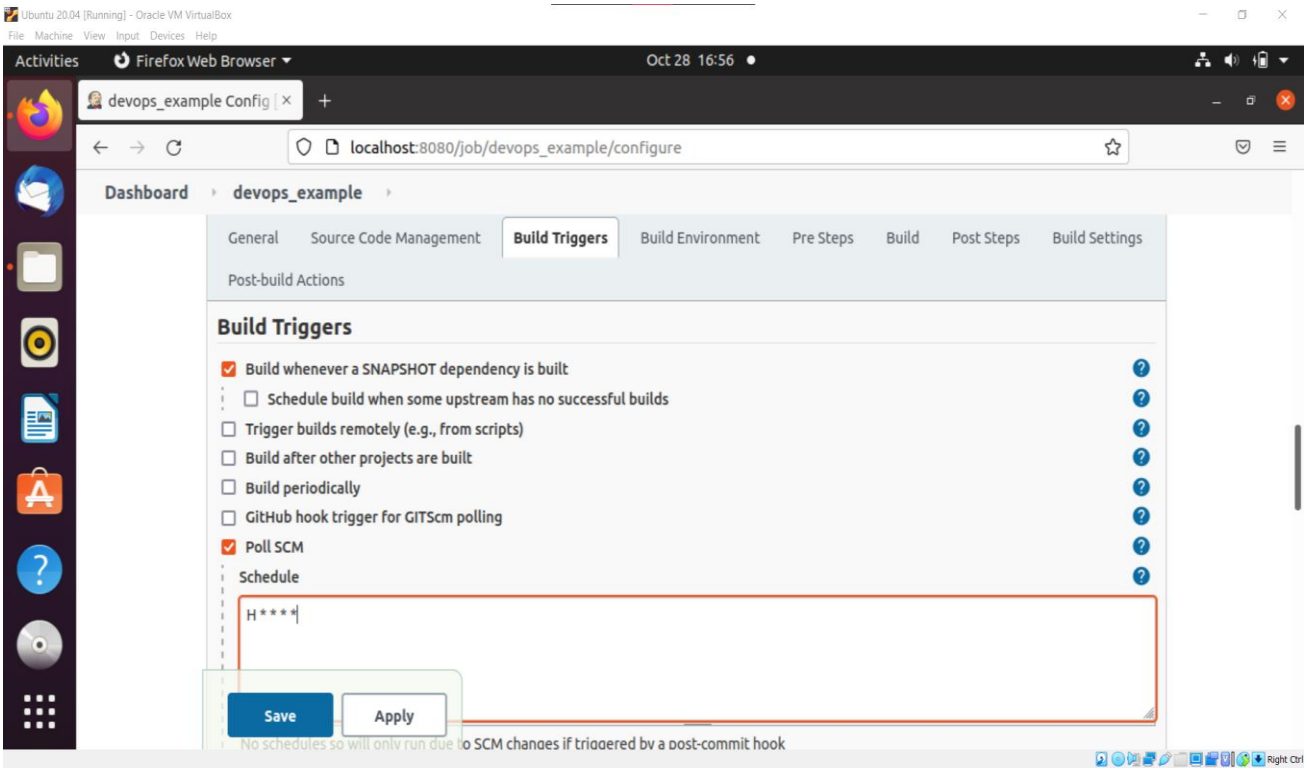
Step 10: Create a new Maven project:



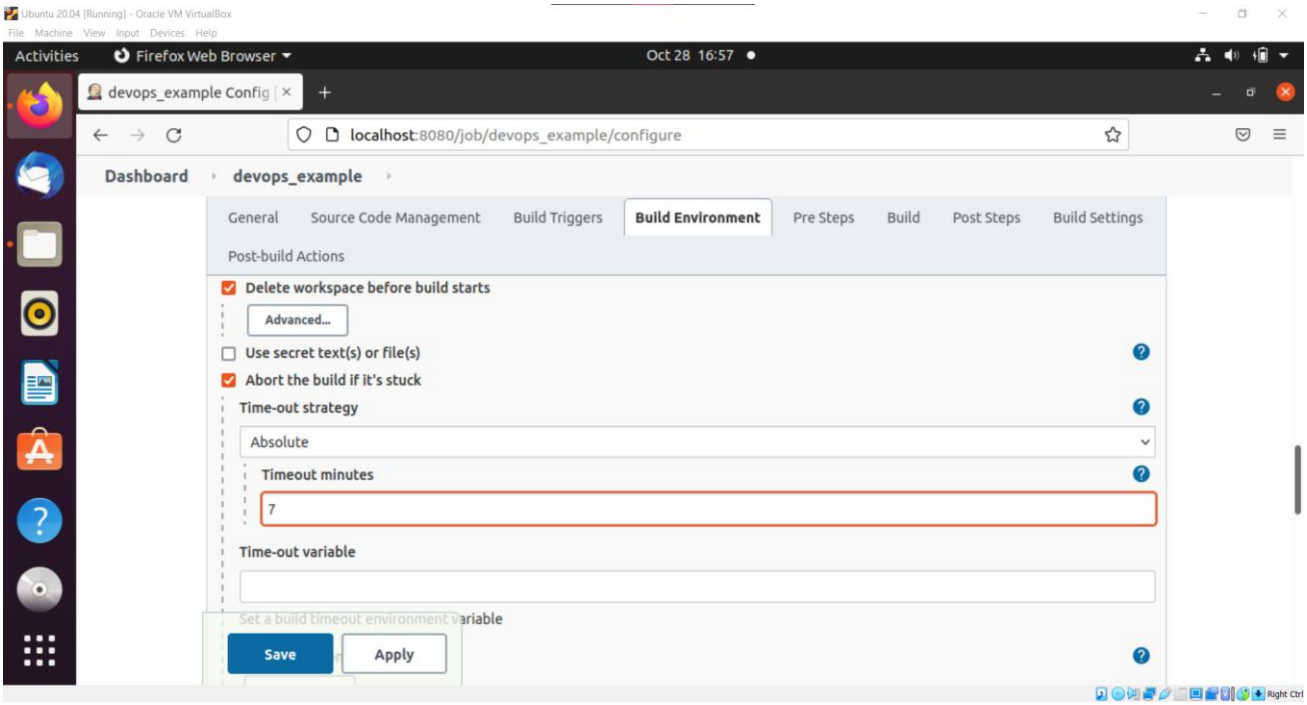
Step 11: Add Git repository and branch in source code management:



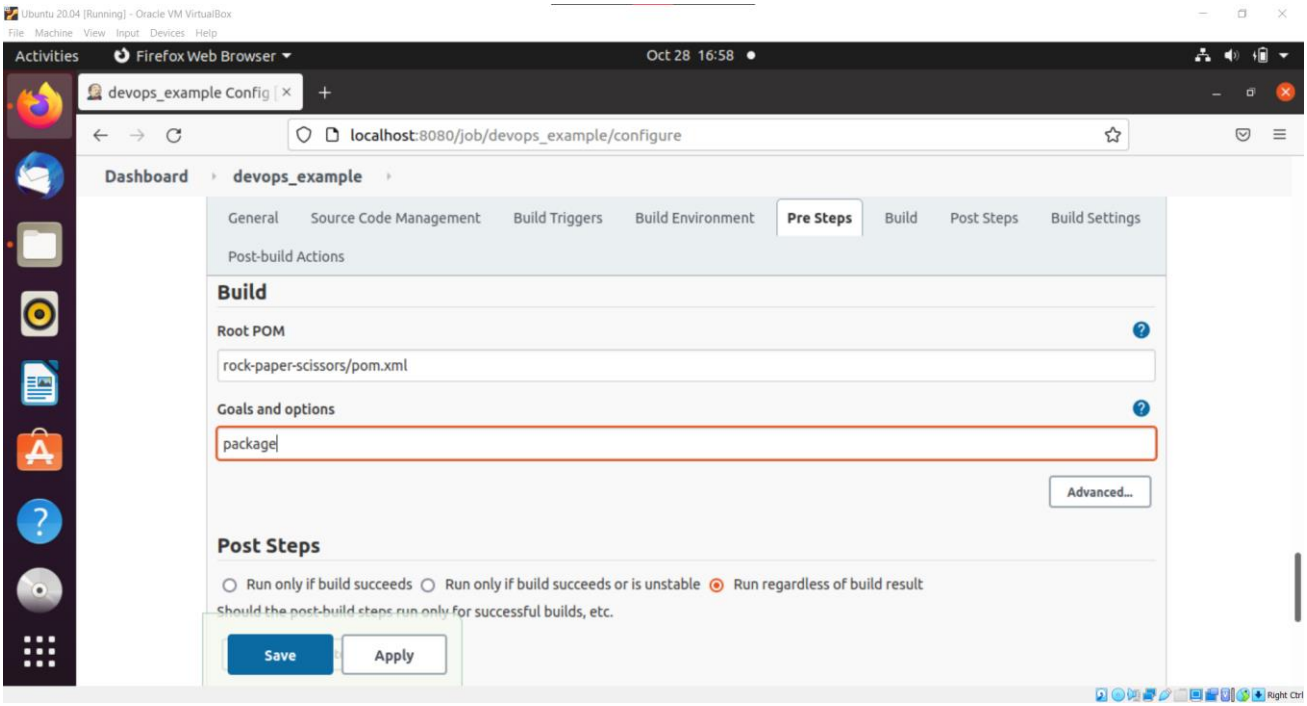
Step 12: Add Poll SCM in Build Triggers:



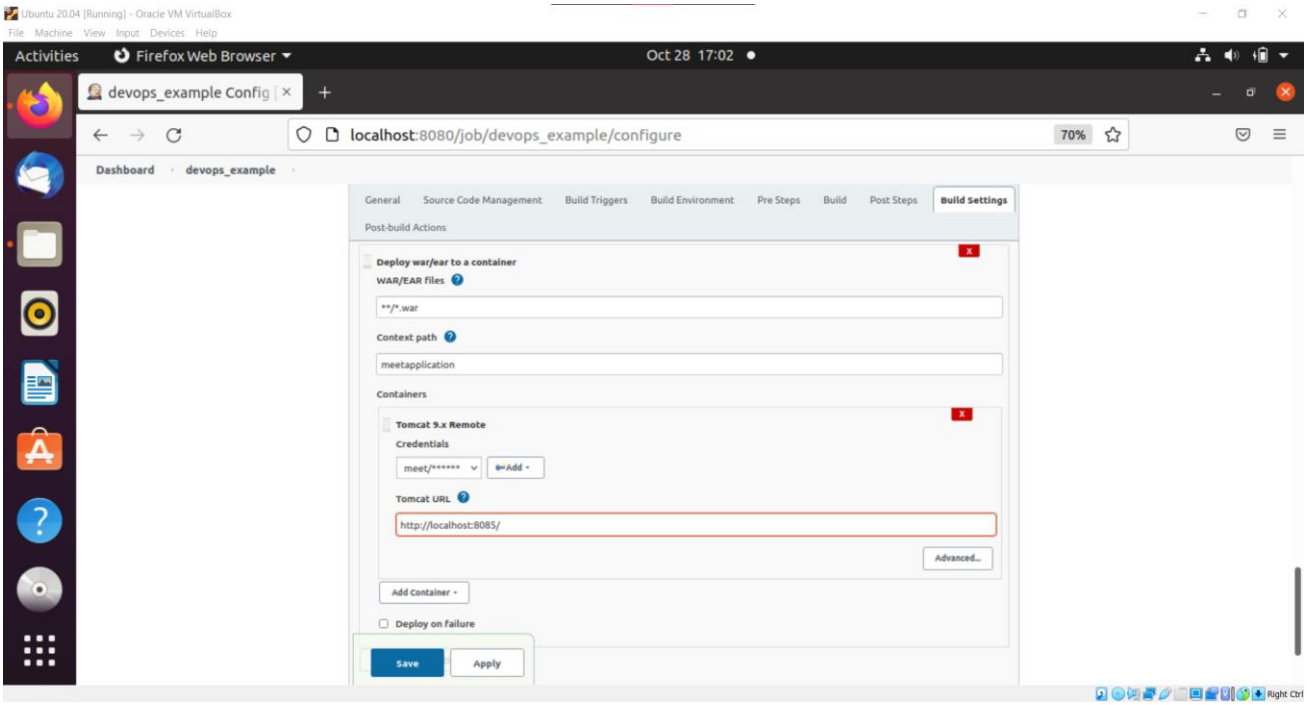
Step 13: Set build environment settings:



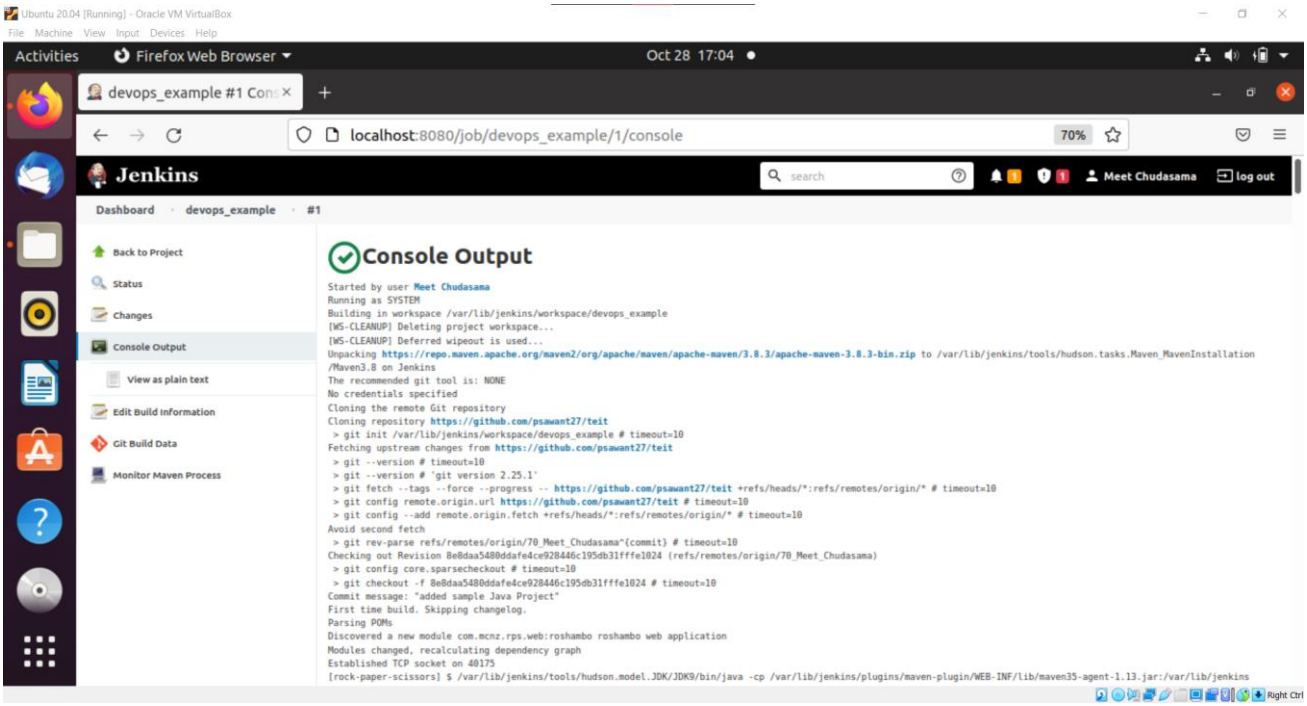
Step 14: Set path to pom.xml and build goals to “package”

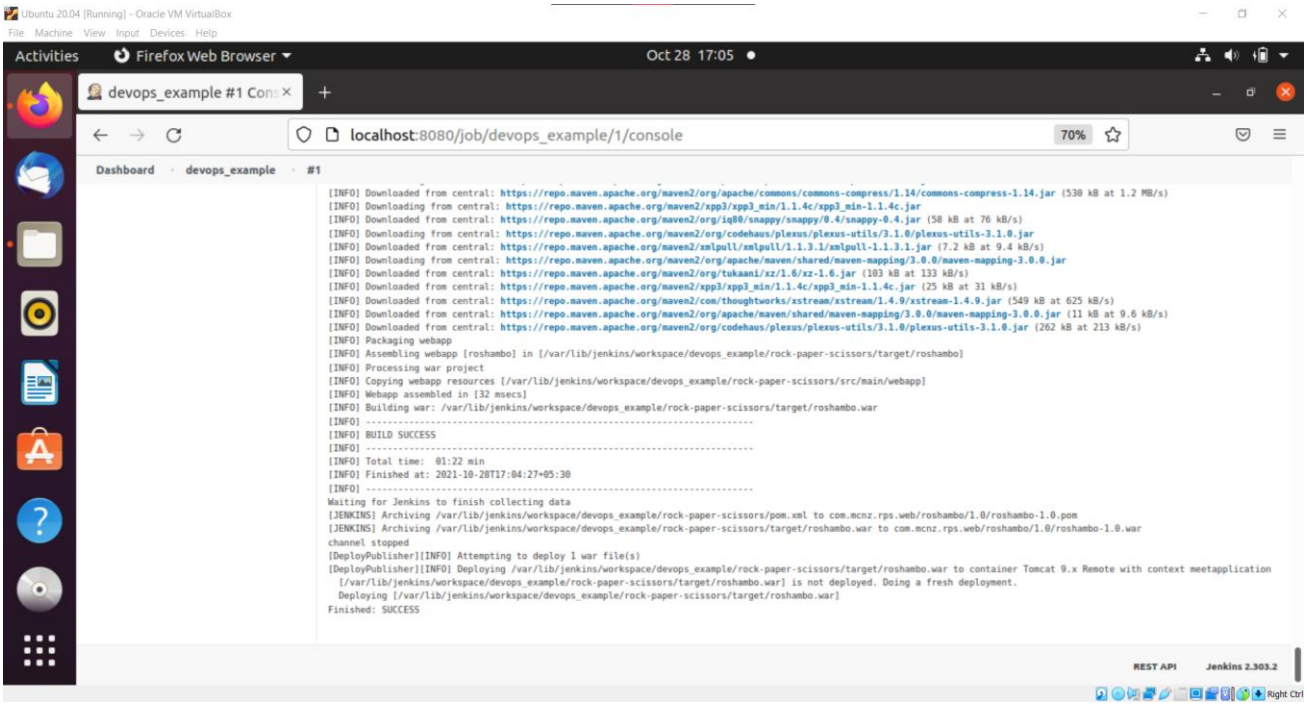


Step 15: Set post build actions and enter credentials set in tomcat-users.xml in Step 5 and finally Apply and Save:

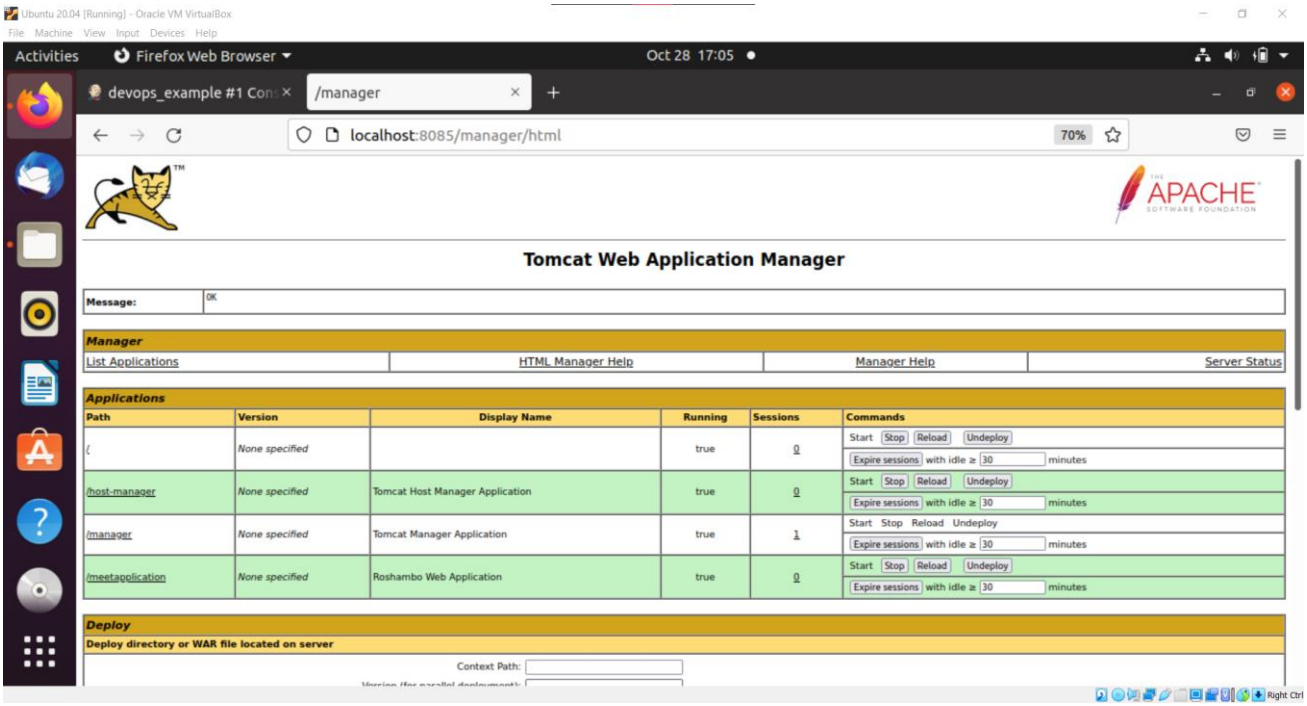


Step 16: On Running the Build, following console output can be seen:

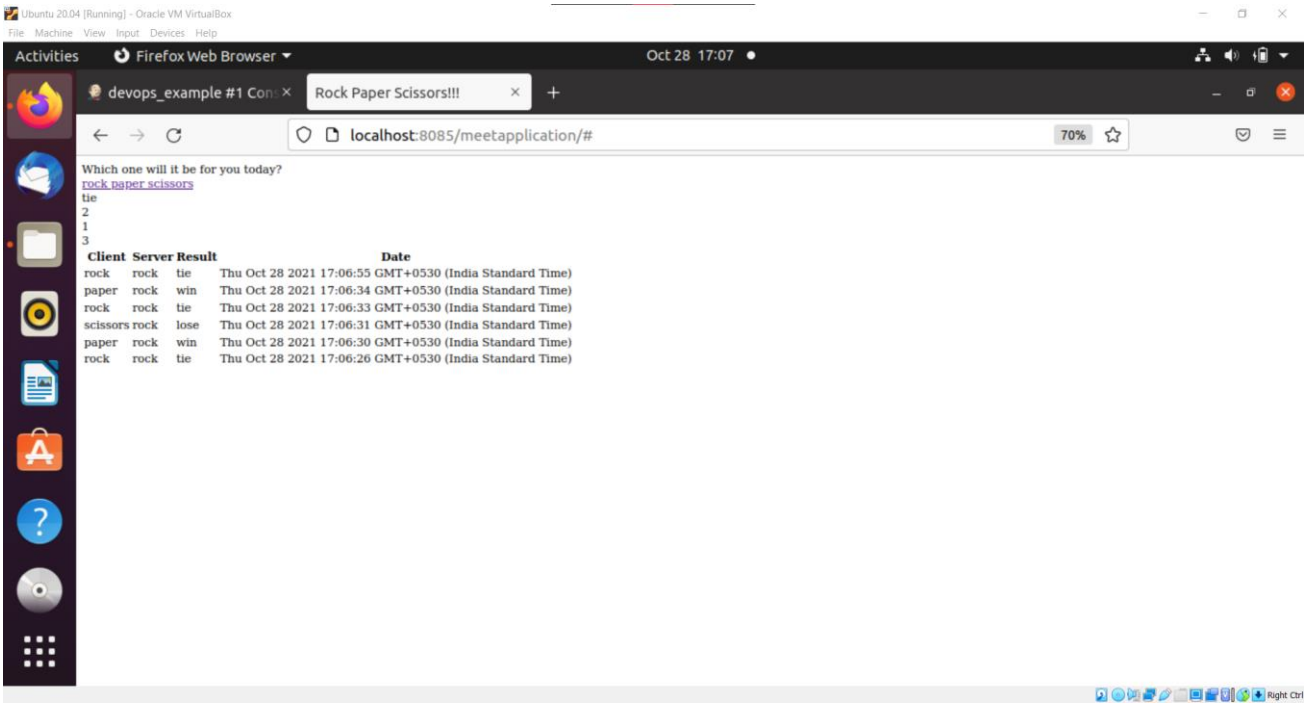


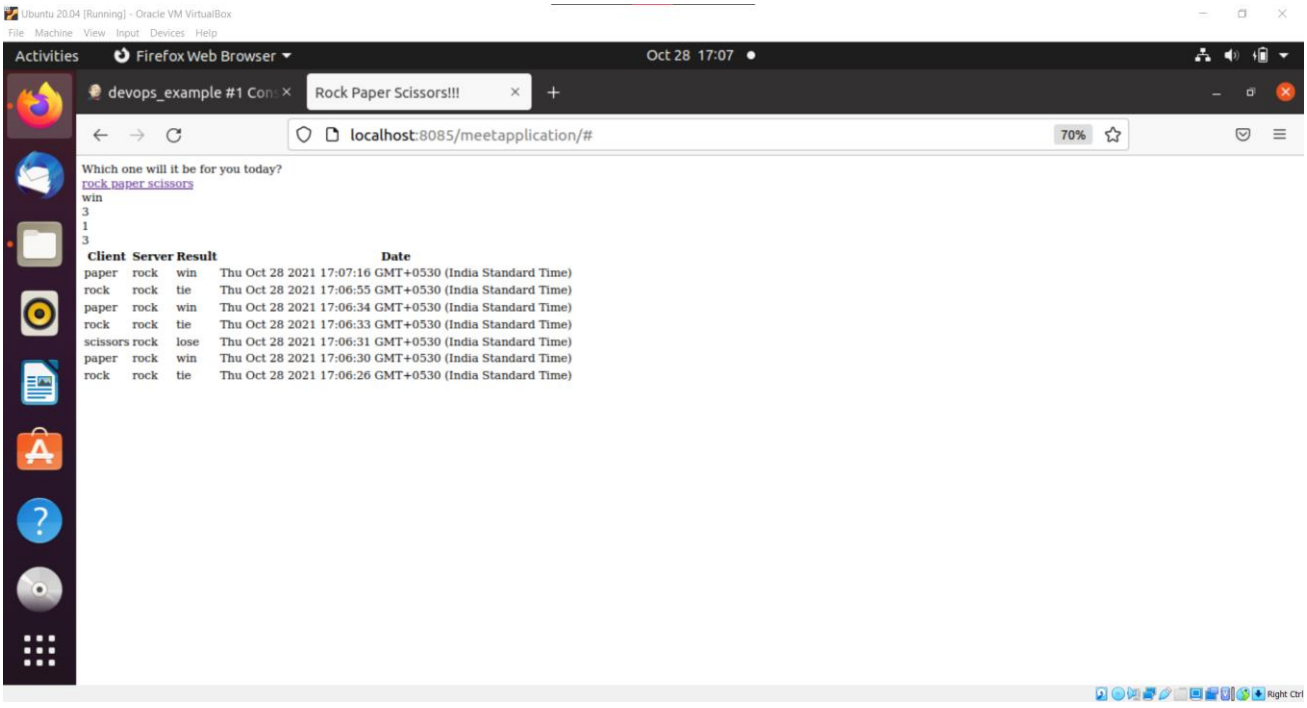


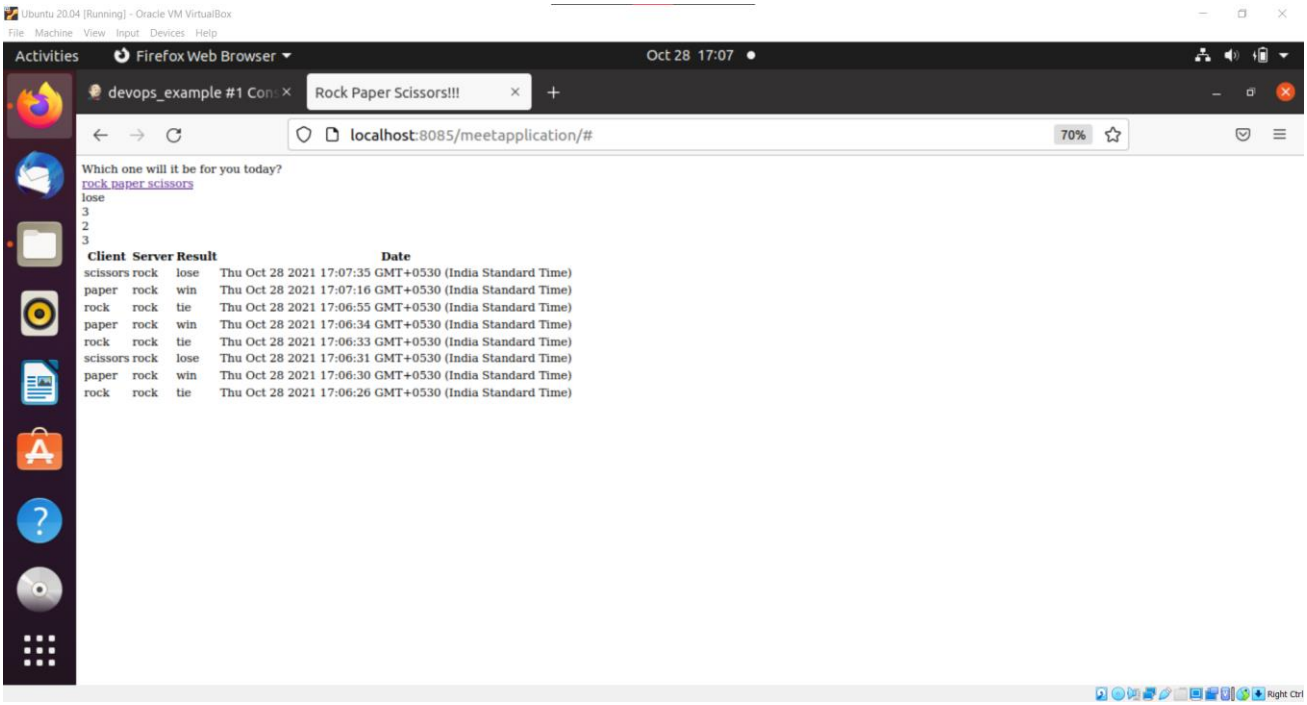
Step 16: Go to localhost:8085/manager/html and Our web application can be seen running under path /harshittomcat as specified earlier:



Step 17: on selecting meetapplication, we can see that the Rock Paper Scissors app is successfully running on localhost:8085/meetapplication:







Conclusion:

We have implemented the complete procedure of installation and configuration of Apache Tomcat, created a Maven project and successfully deployed the application to the Tomcat server.