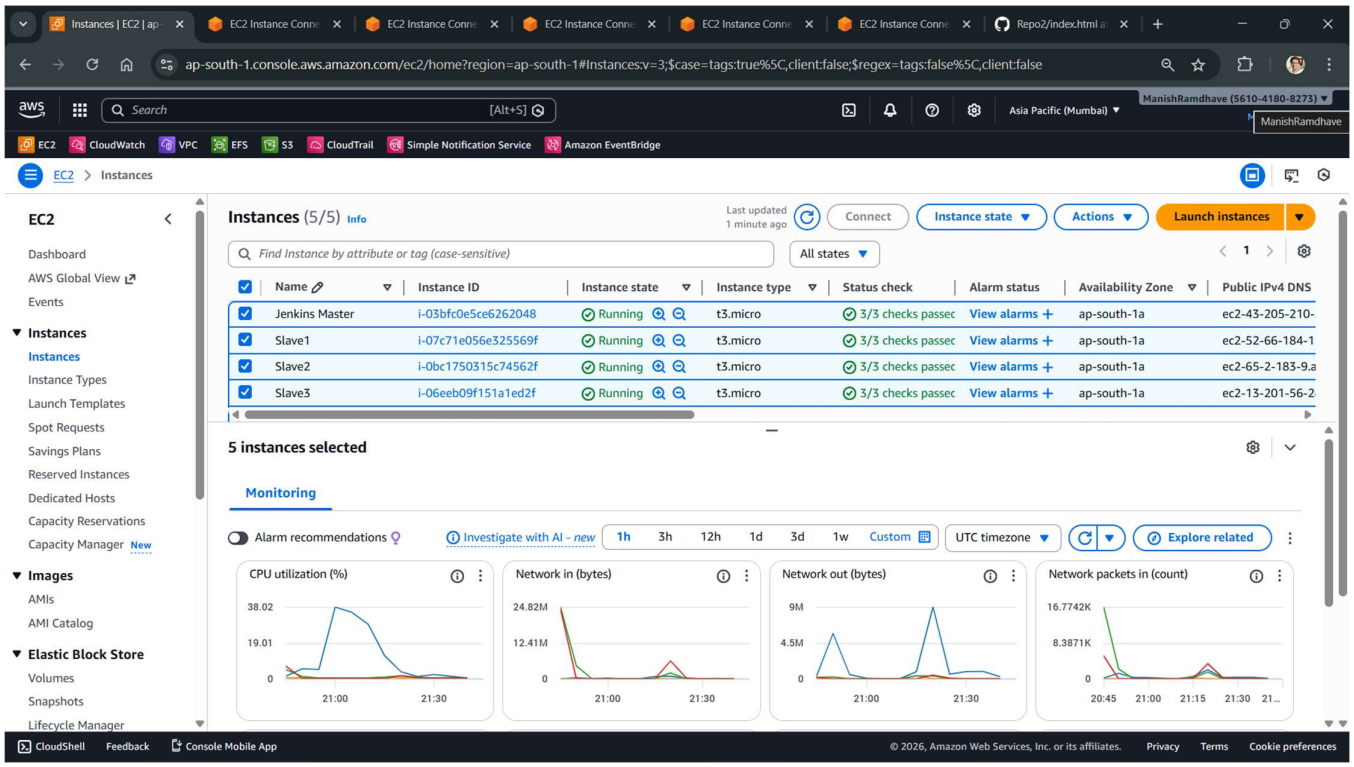
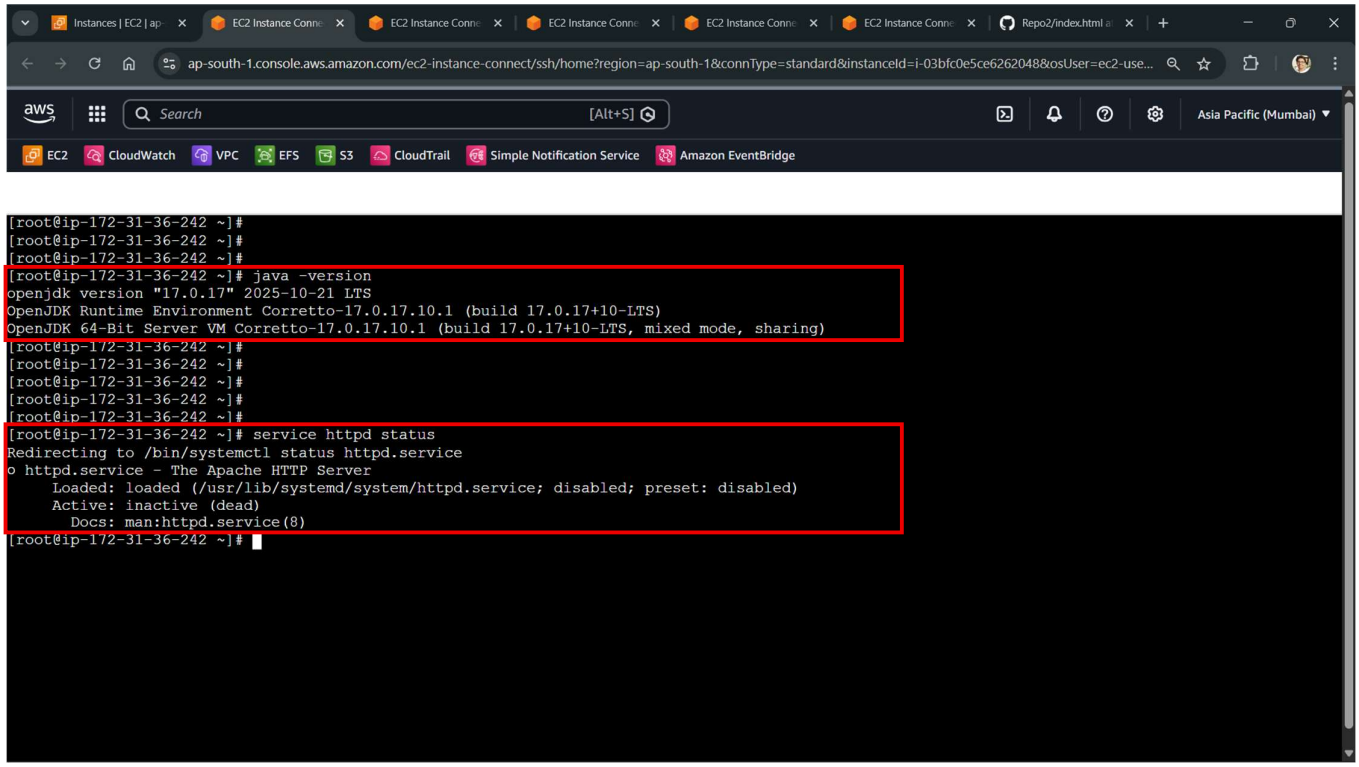
Jenkins Assignment 4

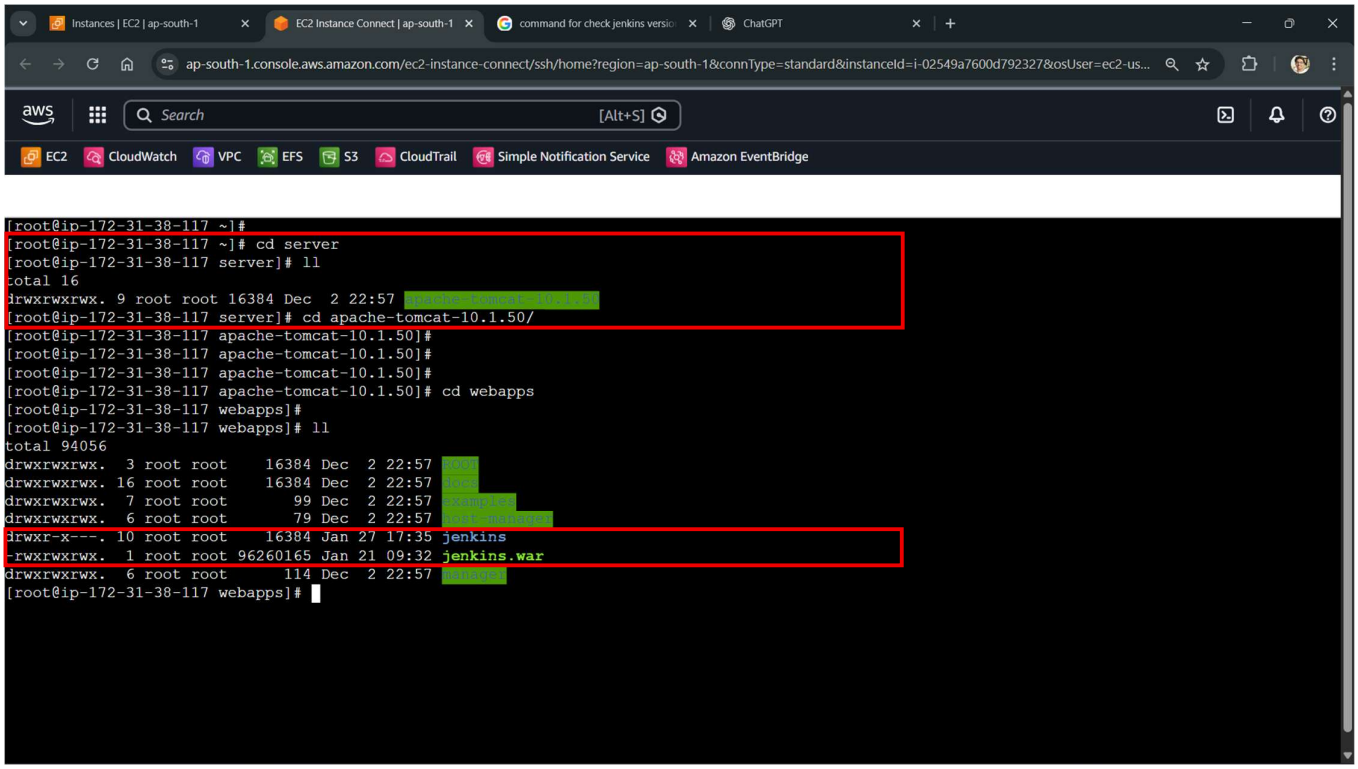
Step 1: Launched four instances, Jenkins Master, Slave1, Slave2 and Slave3



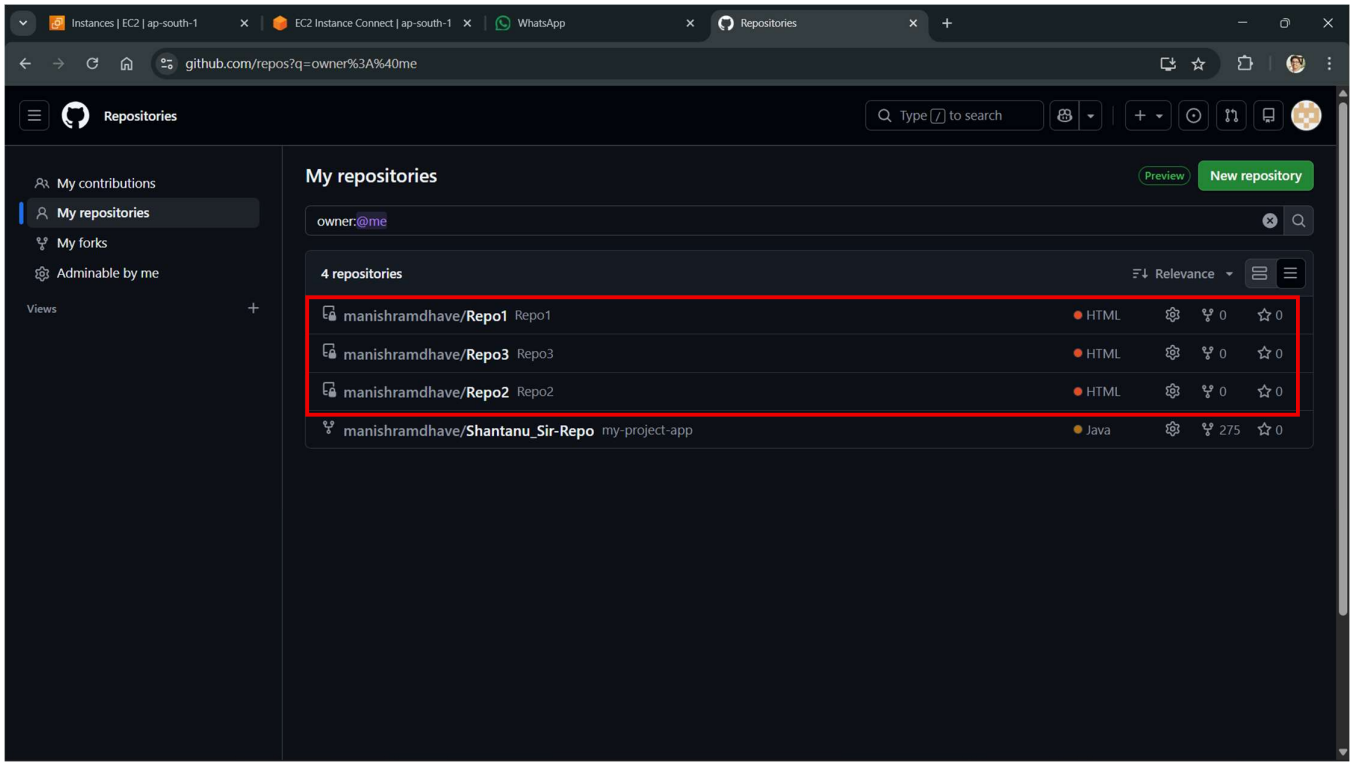
Step 2: Installed Java -17 and Apache-HTTPD **on all the instance**:



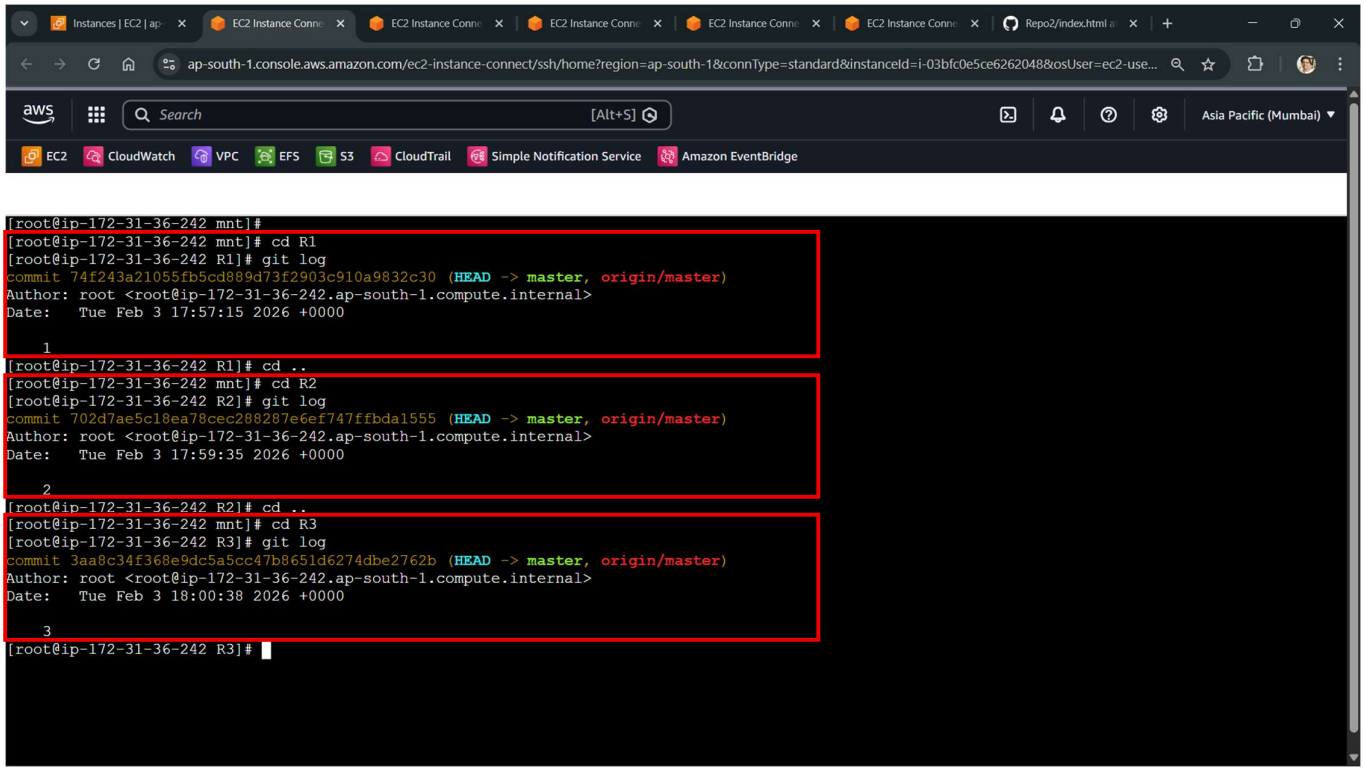
Step 3: Installed Apache-Tomcat-10 and Jenkins on the **Jenkins Master Instance**:



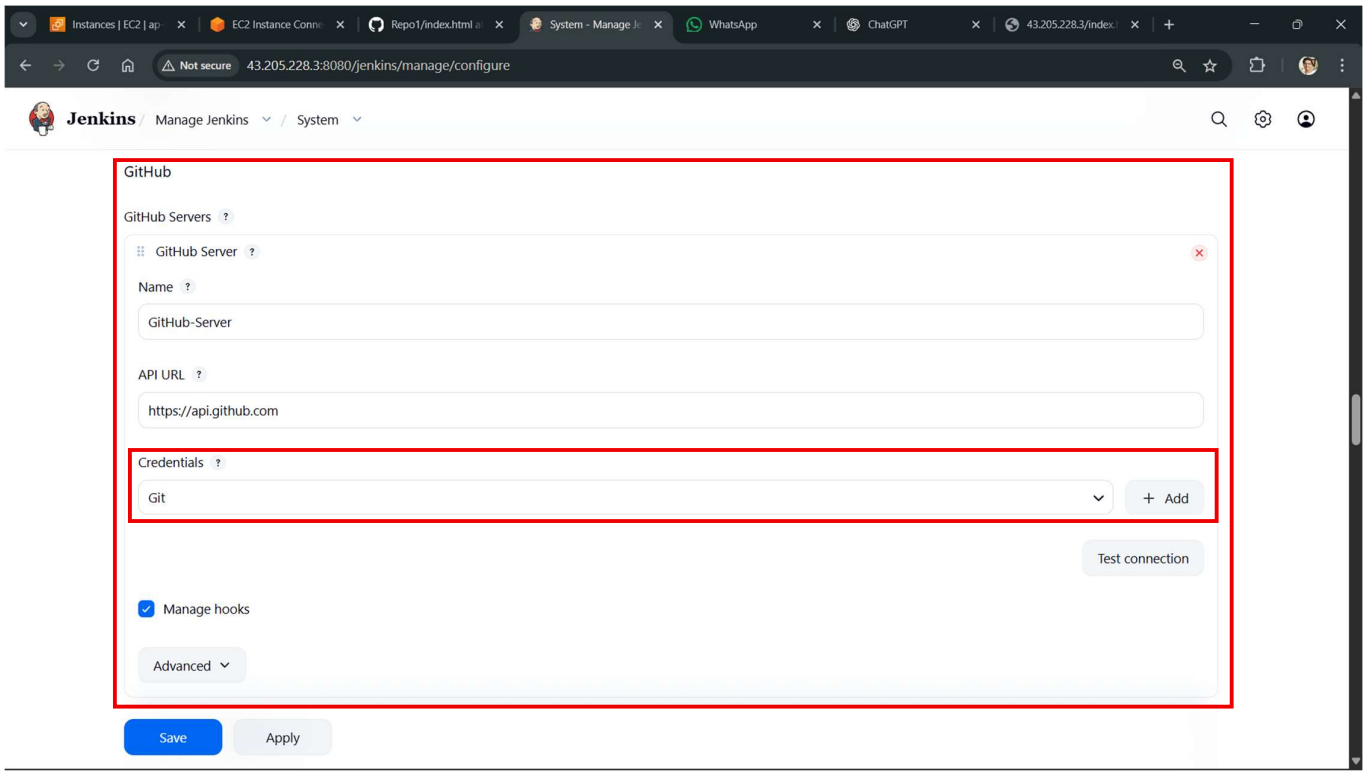
Step 4: Made three Private Repositories Repo1, Repo2 and Repo3 in GitHub account:



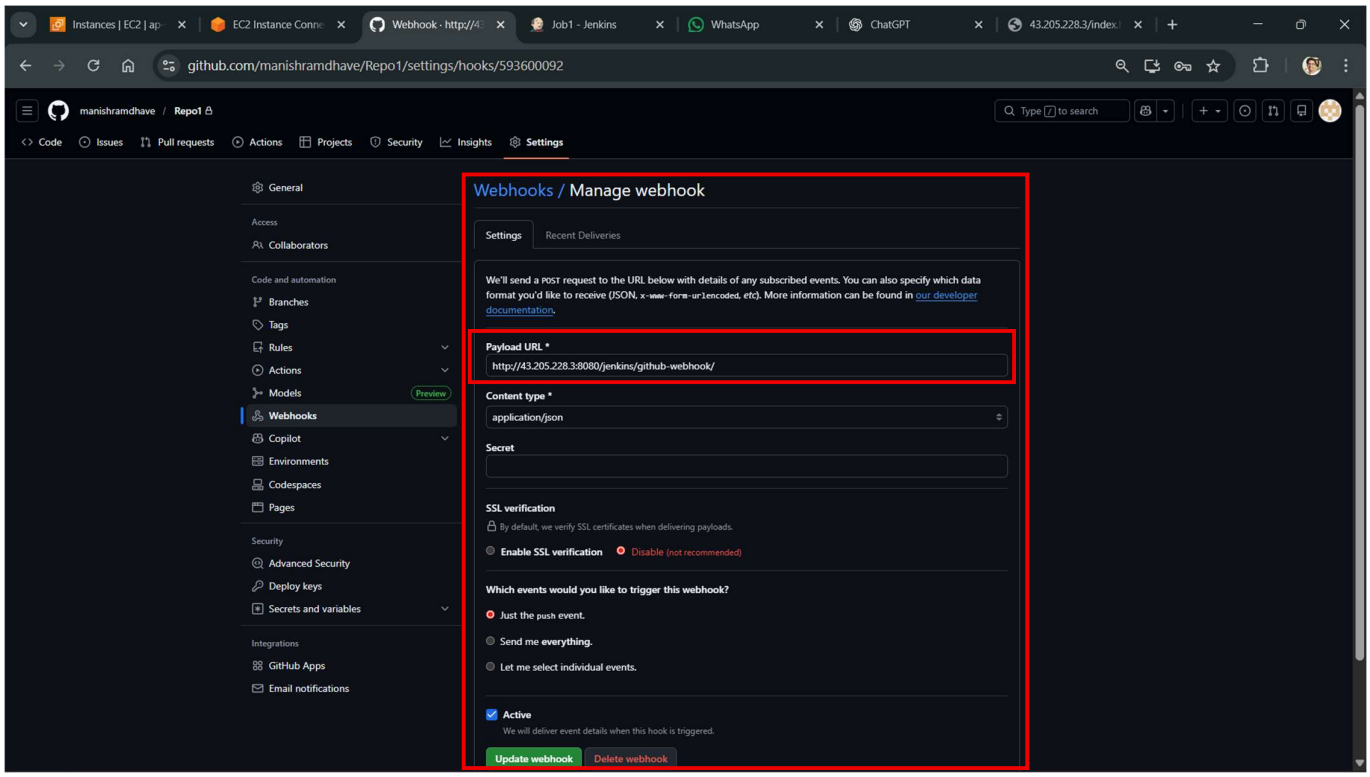
Step 5: Pushed three different index.html files on repositories Repo1, Repo2 and Repo3 respectively:



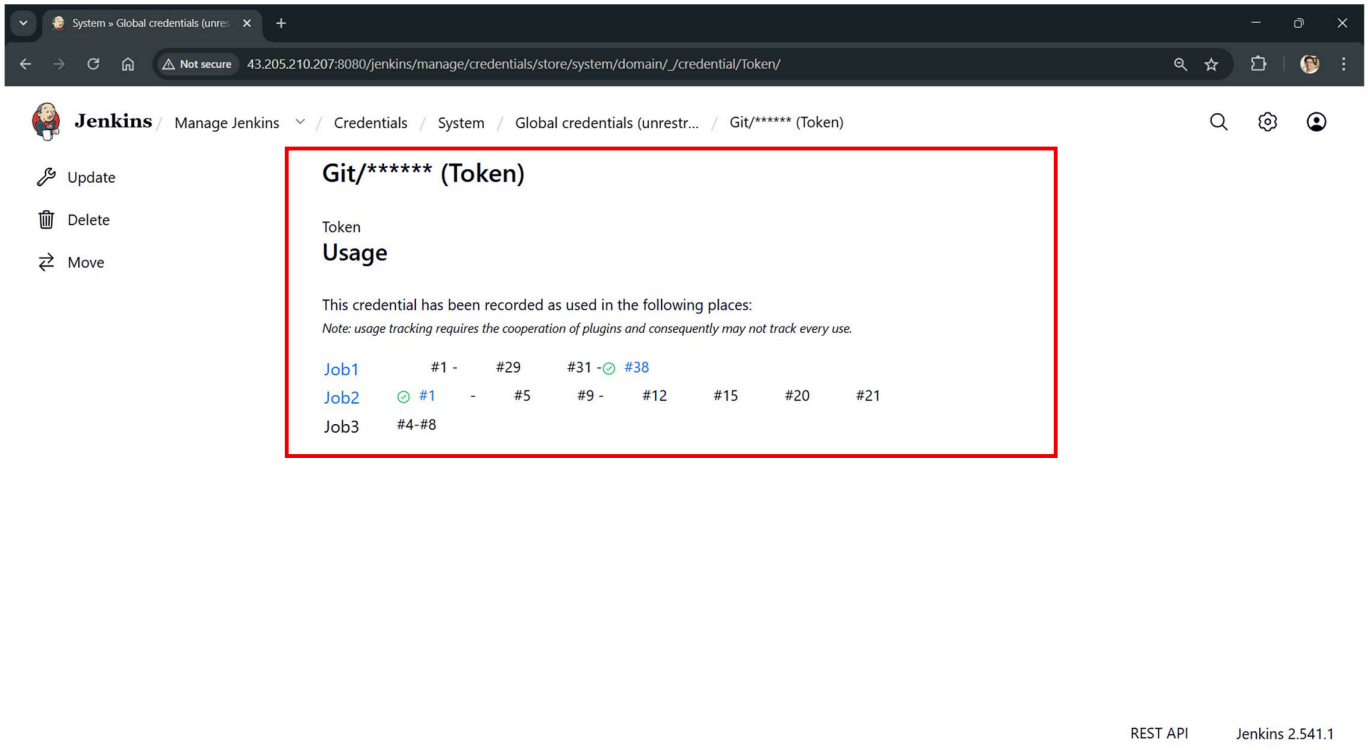
Step 6: Created an API Connection between Jenkins to GitHub Repositories in 'Manage Jenkins' by creating a Secret Text (Credential) using a GitHub Token in Jenkins:



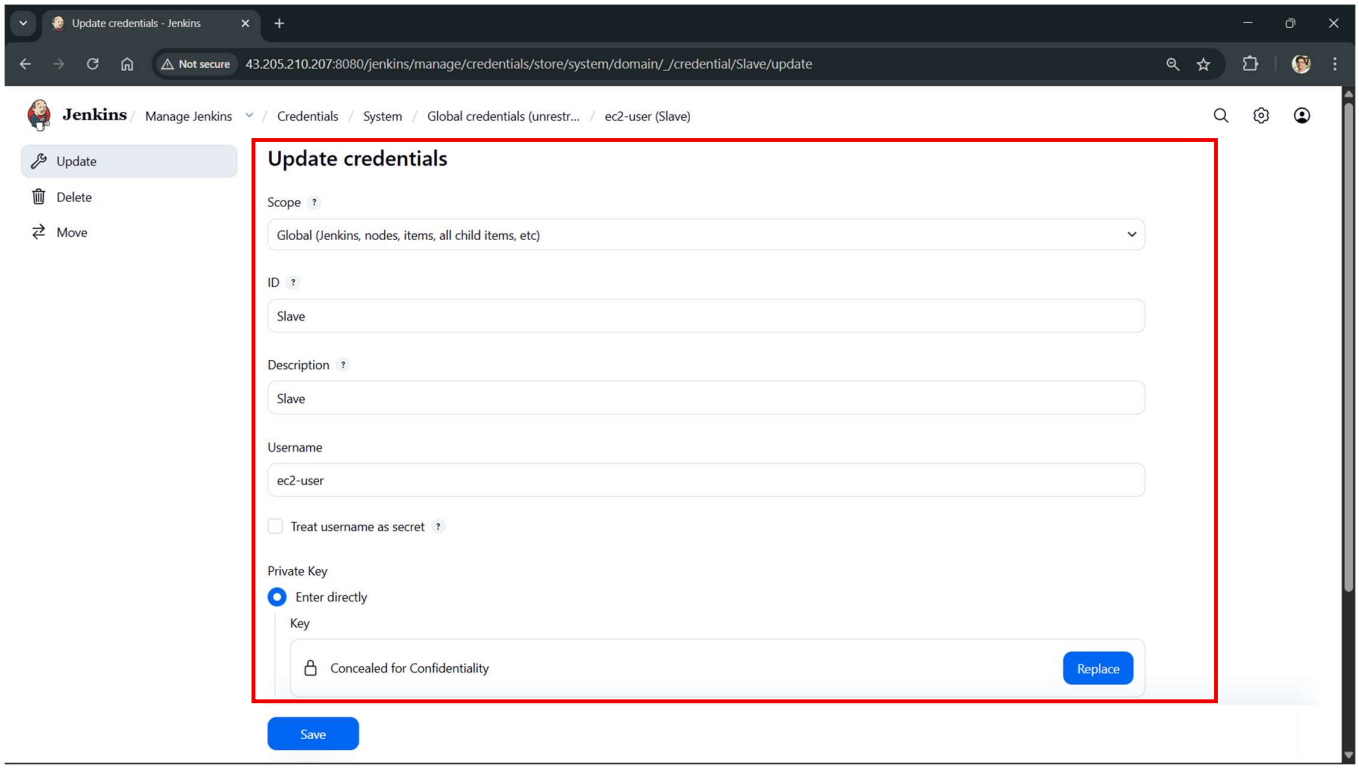
Step 7: Created an API Connection between Jenkins and every GitHub Repositories by using ‘Git Webhooks’ (i.e. setting up Jenkins URL in Git) :



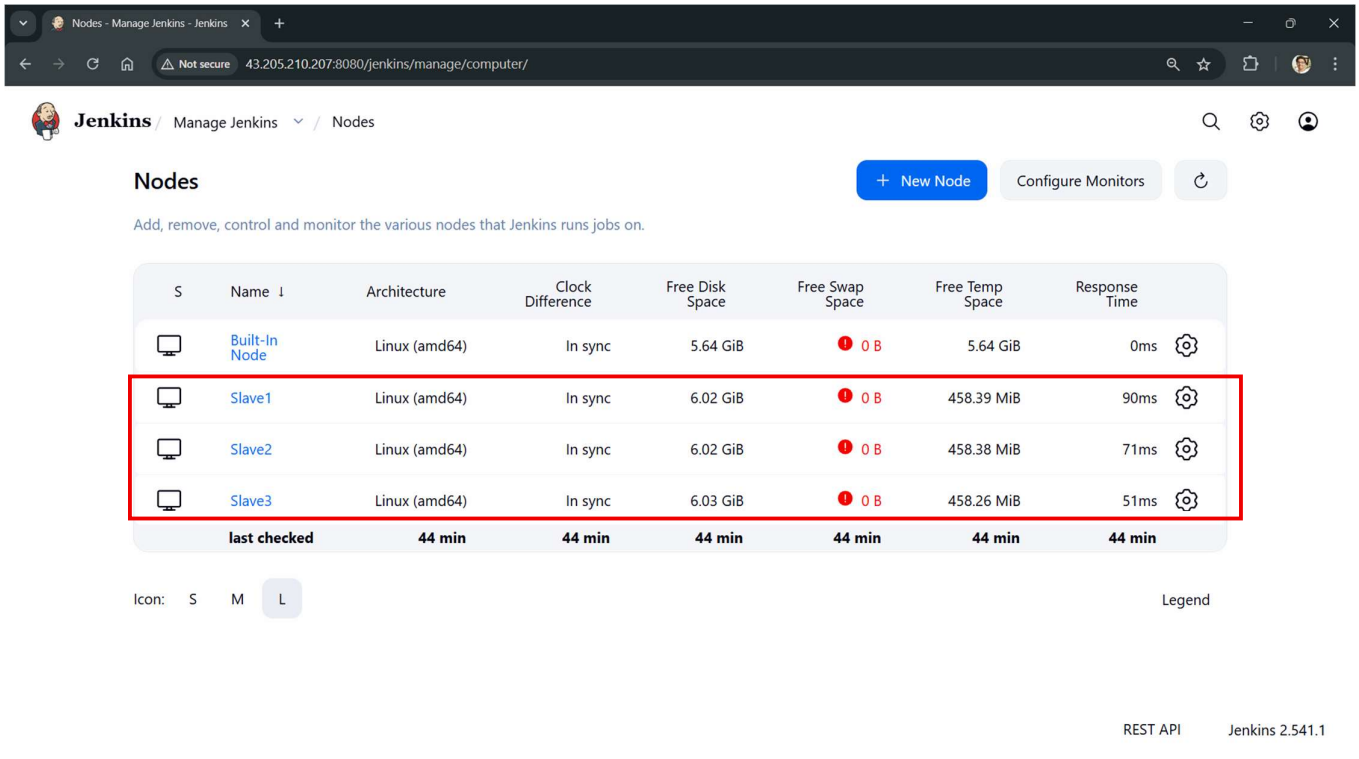
Step 8: Created a ‘Username and Password’ Credential for accessing the Private Git Repositories using the GitHub Token:



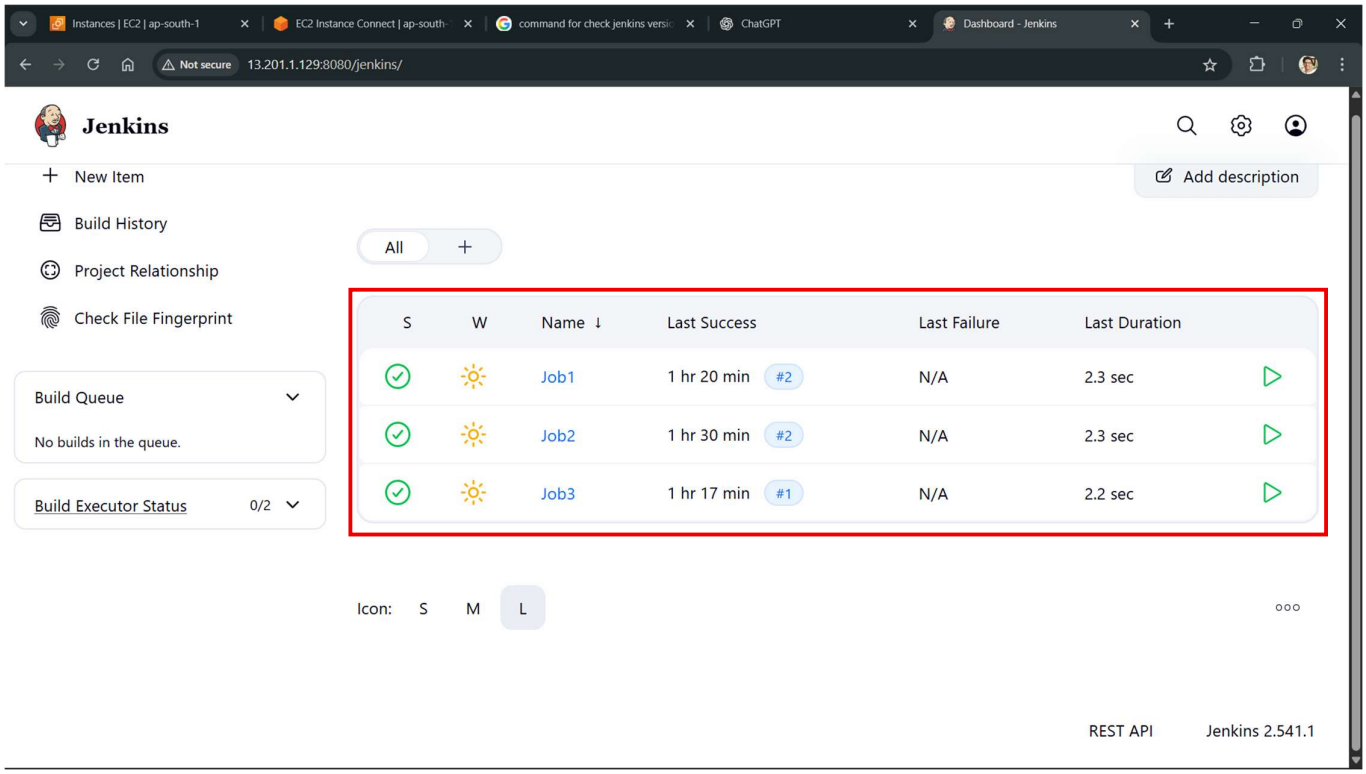
Step 9: Created a ‘SSH Username with private key’ Credential for Jenkins Master and Slave Connections (One Credential is enough for all the Salves):



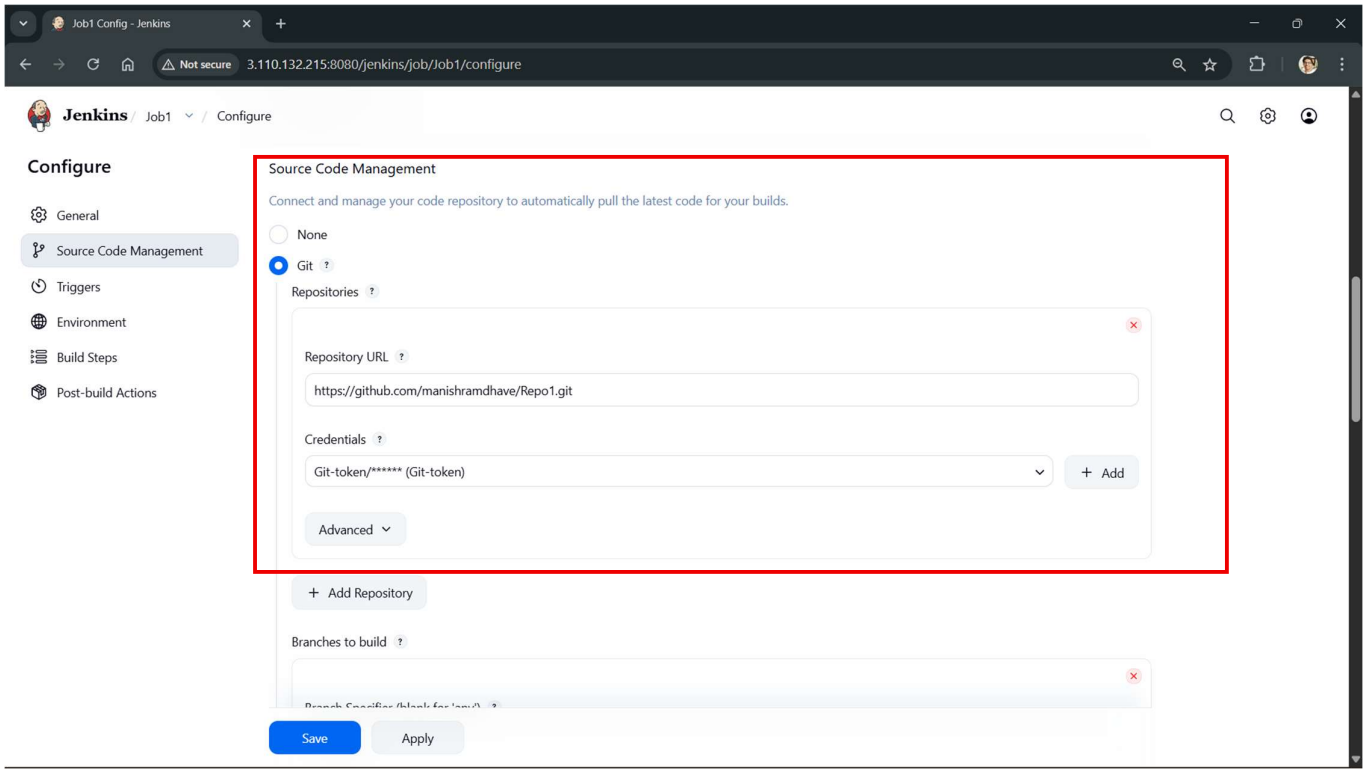
Step 10: Created three Nodes for to establish the connection between Jenkins Master and Slave Instances using the **‘Credential’** and **‘Manually trusted key Verification Strategy’**:



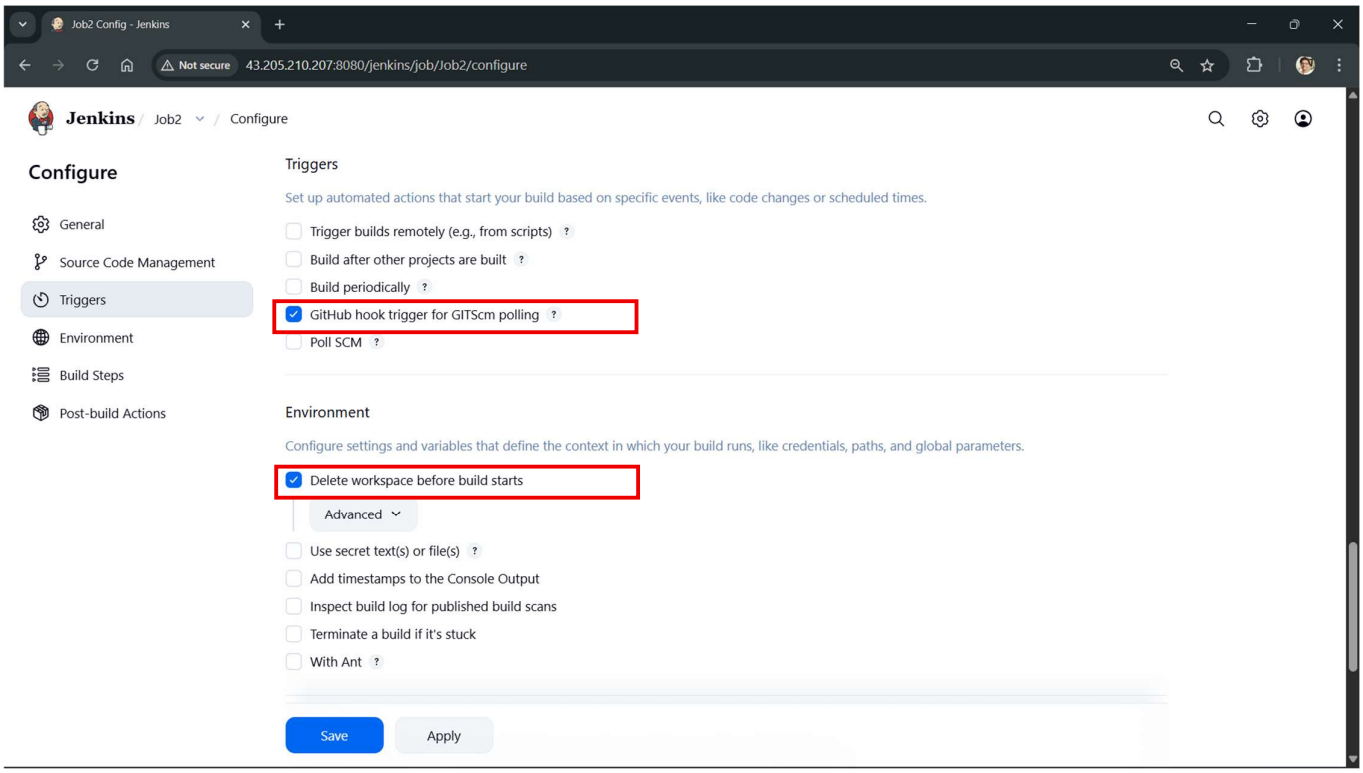
Step 11: Launched the Jenkins and created three different Jobs Job1, Job2 and Job3:



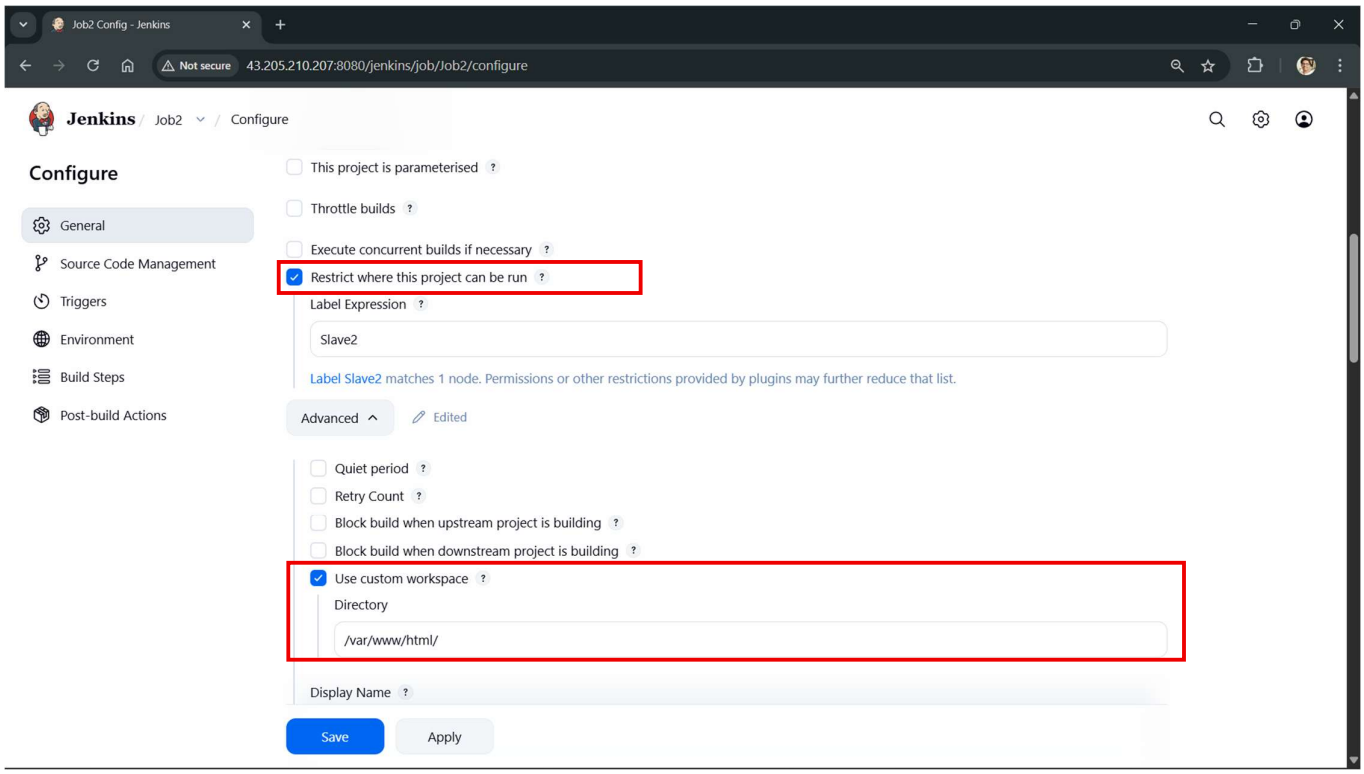
Step 12: Integrated Git with Jenkins by creating ‘Credentials’ by using the Git Token:



Step 13: Enabled **'GitHub hook Trigger for GITScm polling'** while configuring all three Jenkins Jobs and also enabled **'Delete workspace before build starts'**:

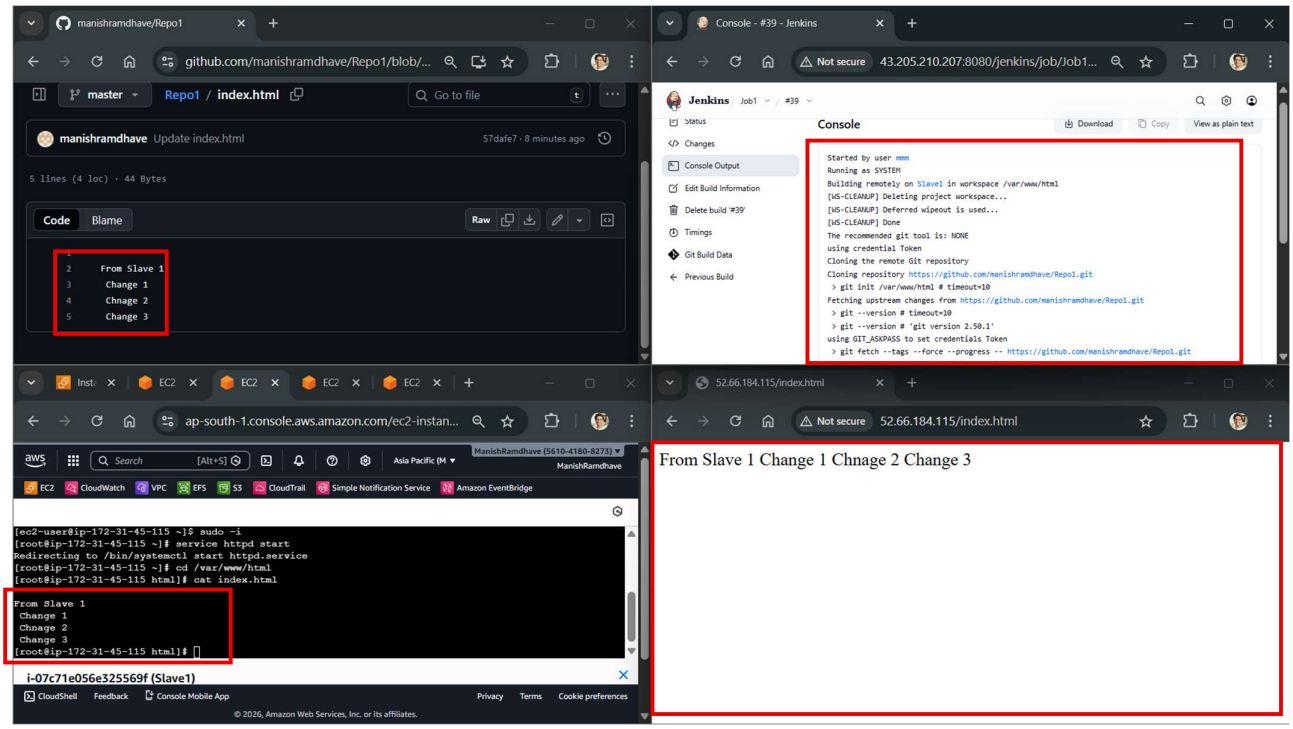


Step 14: Enabled **'Restrict where this project can be run'** and **used a custom workspace** to deploy the index.html file from Git Repositories to **'/var/www/html/'**:

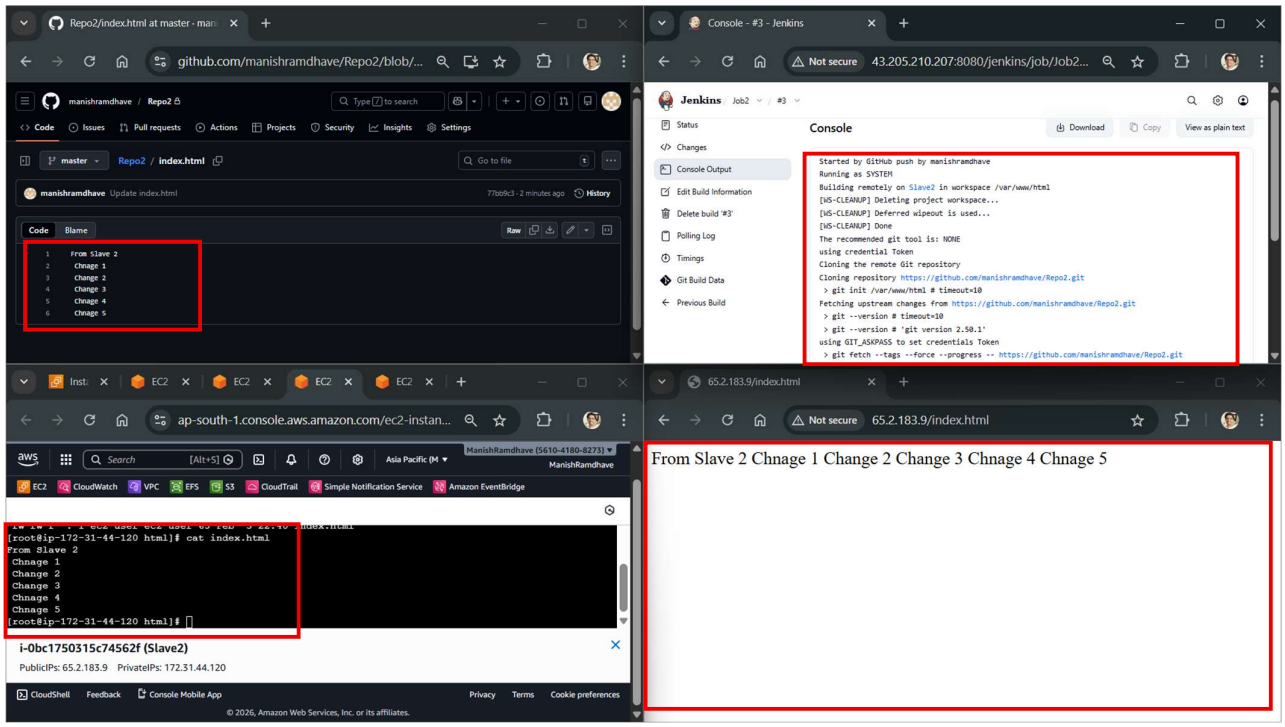


Result:

1. When changes are done in Git Repo1, Build is triggered by Job1 and the index.html file from Repo1 is hosted in the deployment folder of a **Slave1 instance**:



2. When changes are done in Git Repo2, Build is triggered by Job2 and the index.html file from Repo2 is hosted in the deployment folder of a **Slave2 instance**::



3. When changes are done in Git Repo3, Build is triggered by Job3 and the index.html file from Repo3 is hosted in the deployment folder of a **Slave3 instance**::