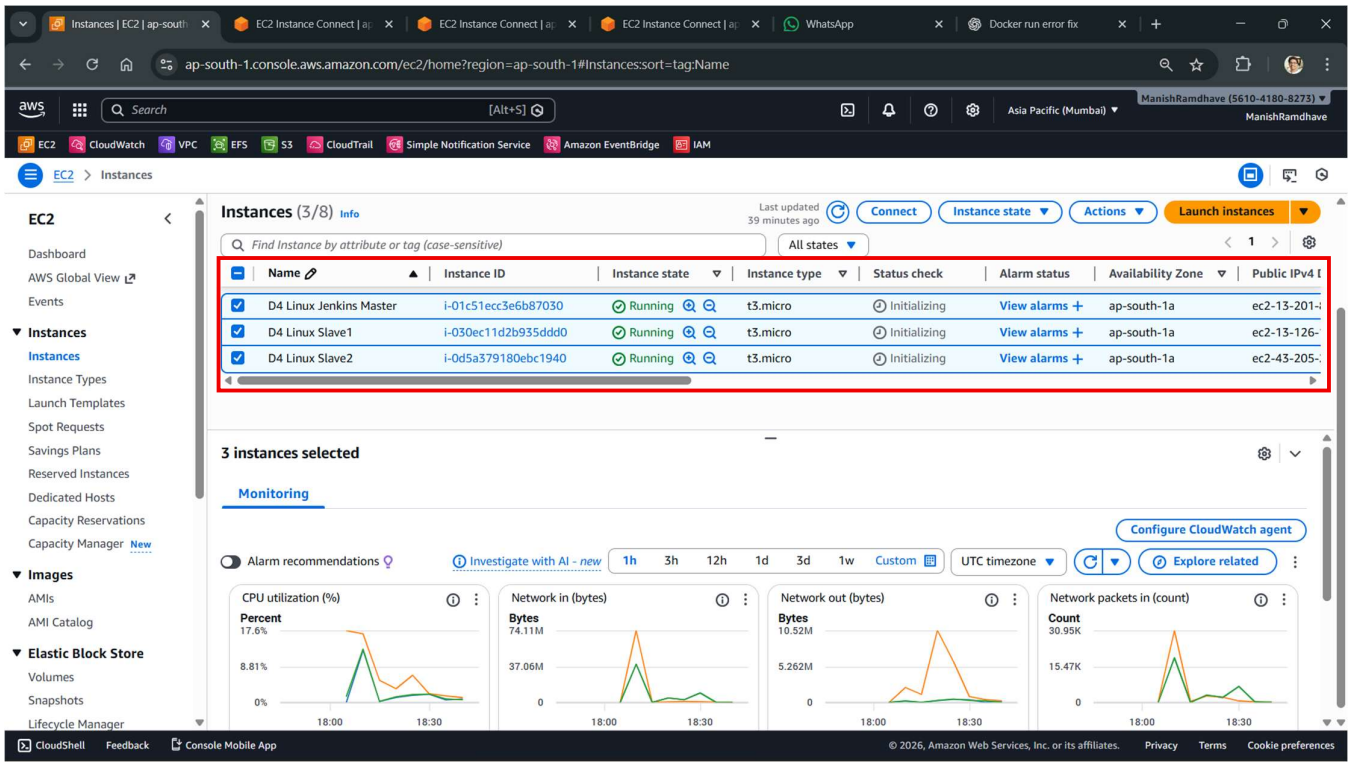
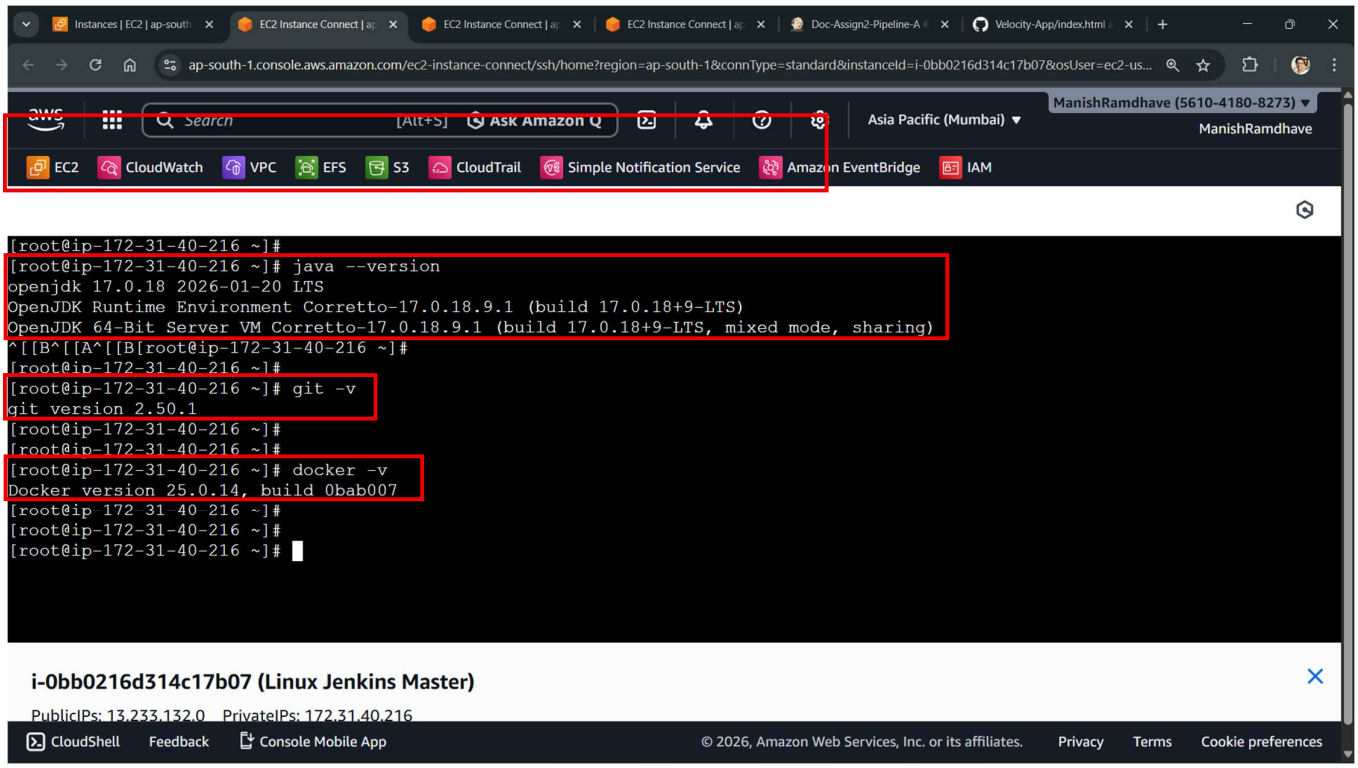
Docker Assignment 4

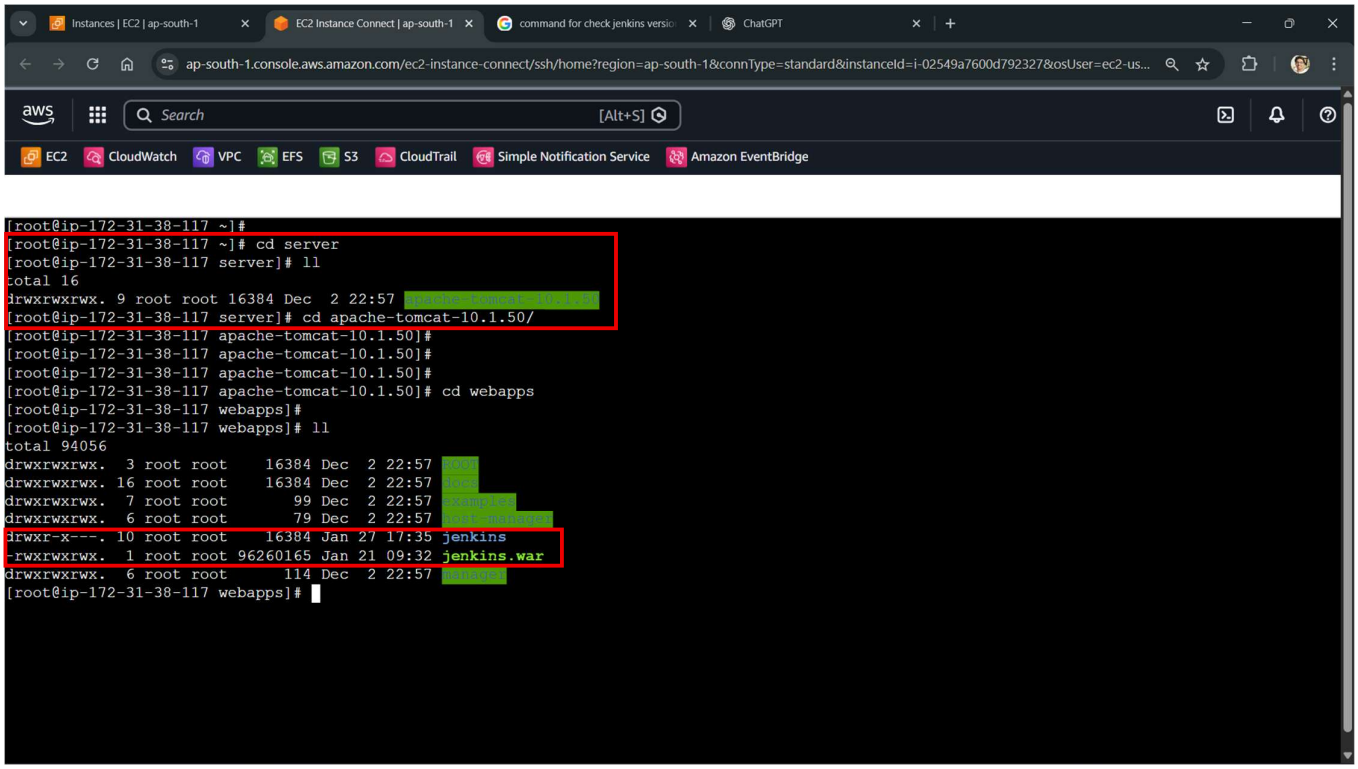
Step 1: Launched three instances, **D4-Jenkins Master, D4-Slave1 and D4-Slave2**



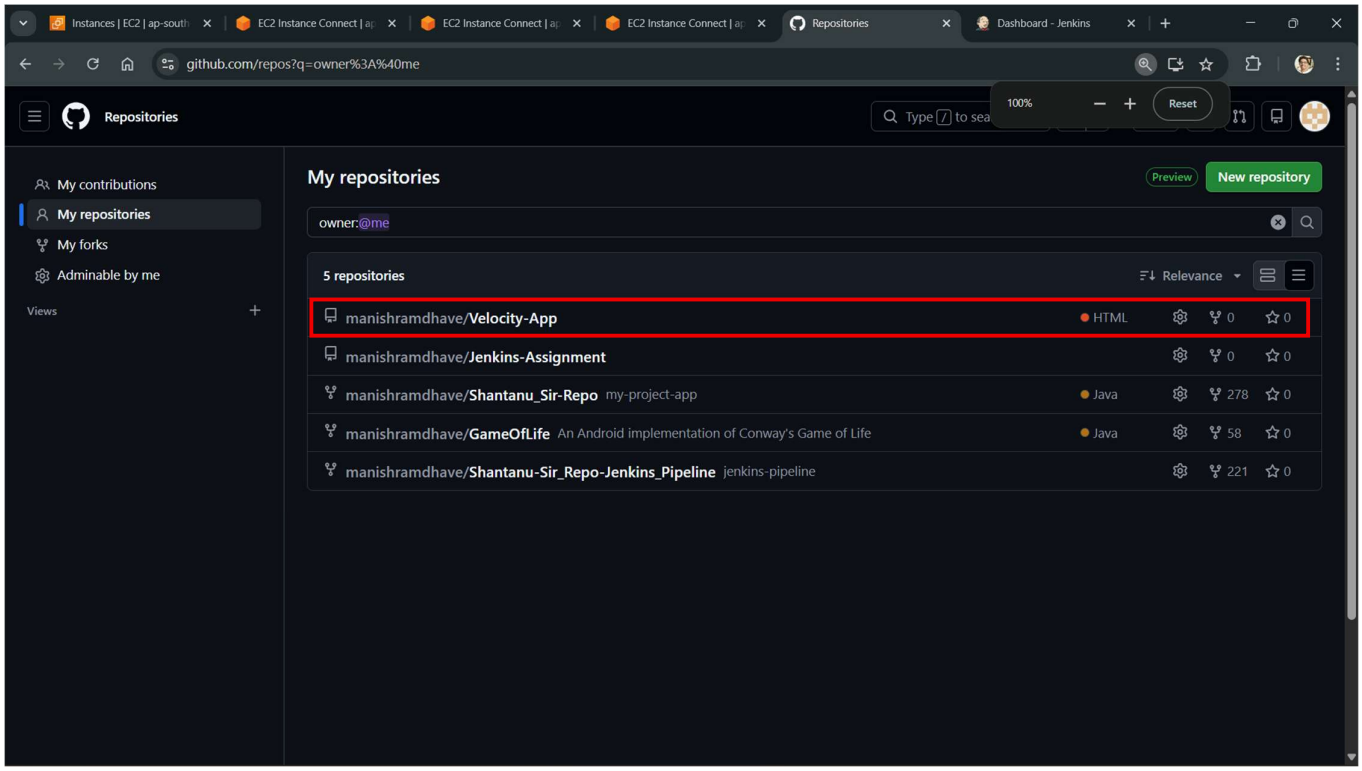
Step 2: Installed **Java-17**, **Git** and **Docker on all the instance**:



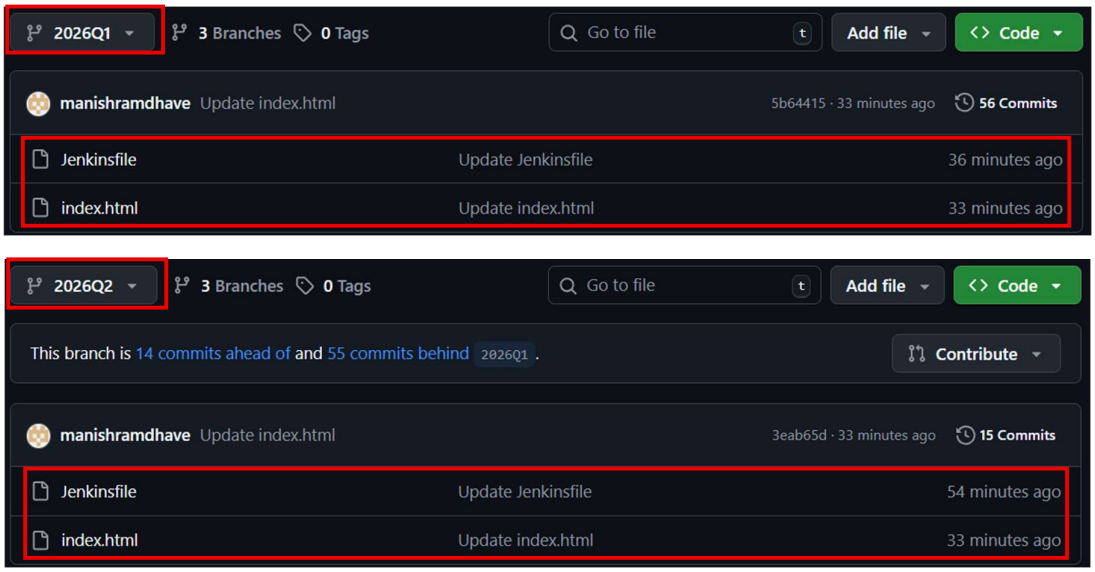
Step 3: Installed **Apache-Tomcat-10 and Jenkins** on the **Jenkins Master Instance**:



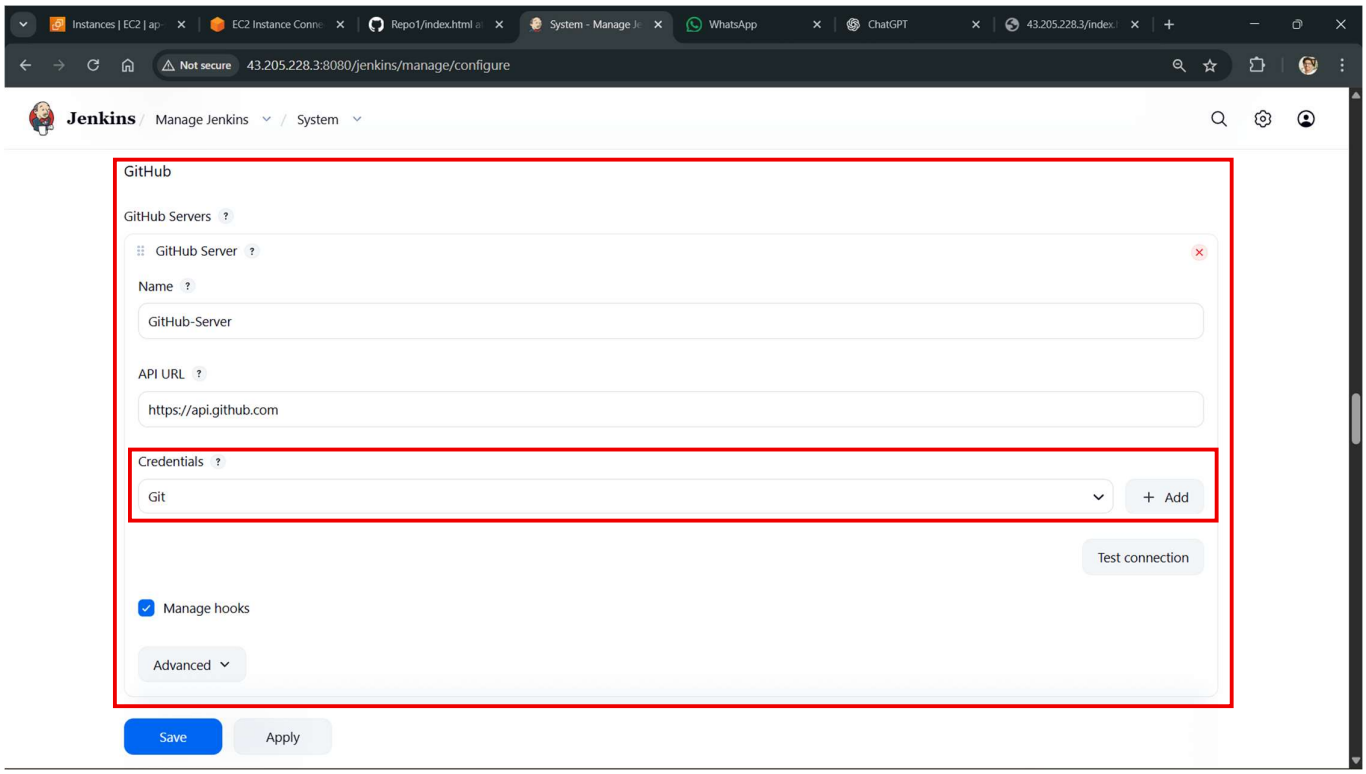
Step 4: Made a Private Repository named **'Velocity-App'** in GitHub account:



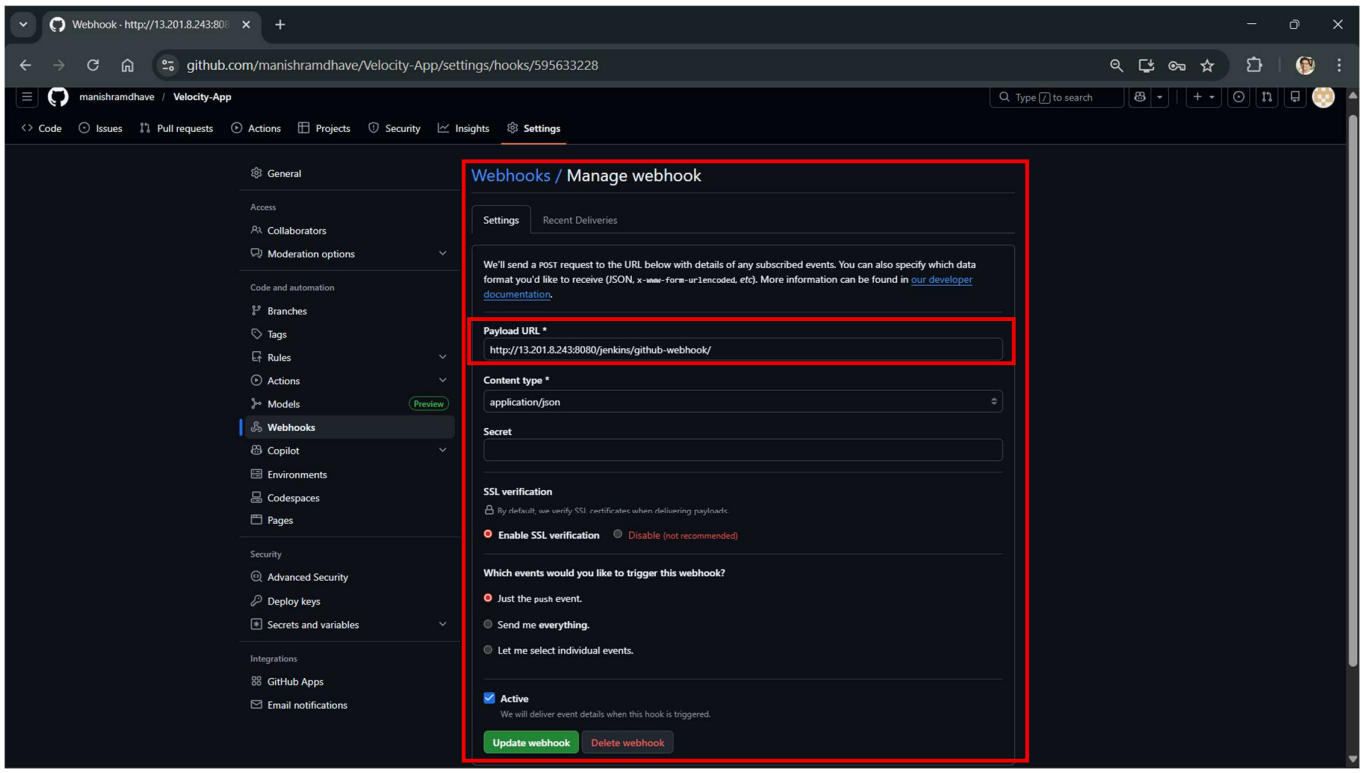
Step 5: Created two branches, **2026Q1 and 2026Q2** in the '**Velocity-App**' Repository and pushed **two different 'index.html'** files and also created **two different 'Jenkinsfile'** files in respective branches:



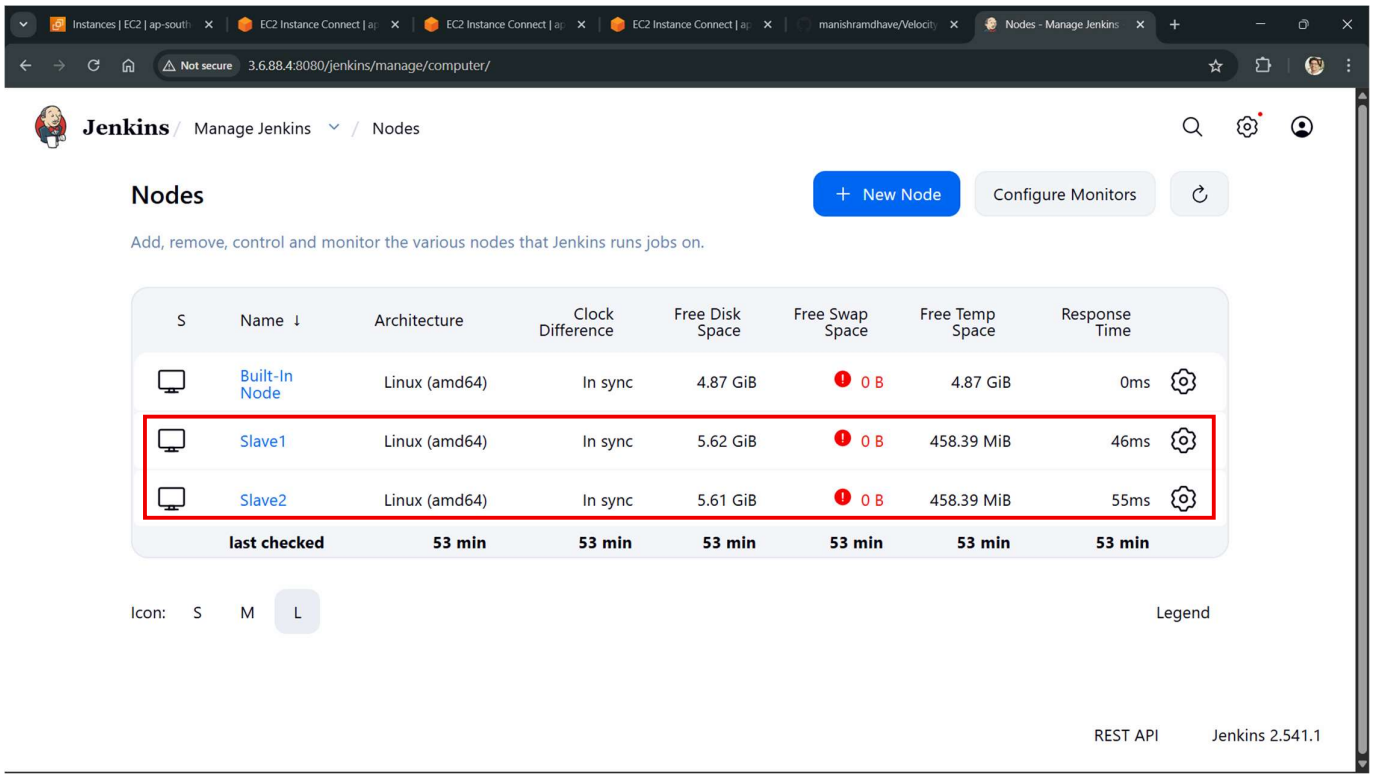
Step 6: Created an **API Connection between Jenkins to GitHub** Repositories in 'Manage Jenkins' by creating **a Secret Text (Credential)** using a GitHub Token in Jenkins:



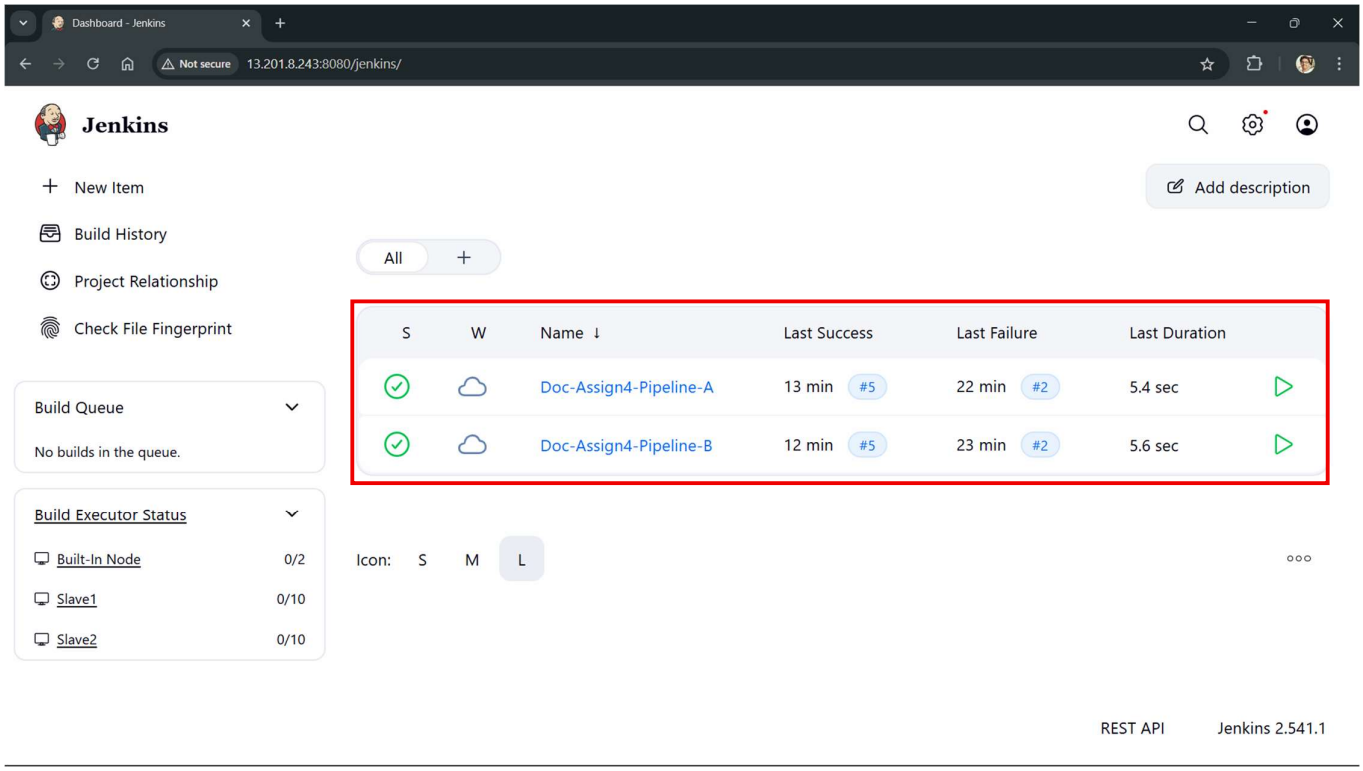
Step 7: Created an **API Connection between Jenkins and GitHub Repositories** by using 'Git Webhooks' (i.e. setting up Jenkins URL in Git) :



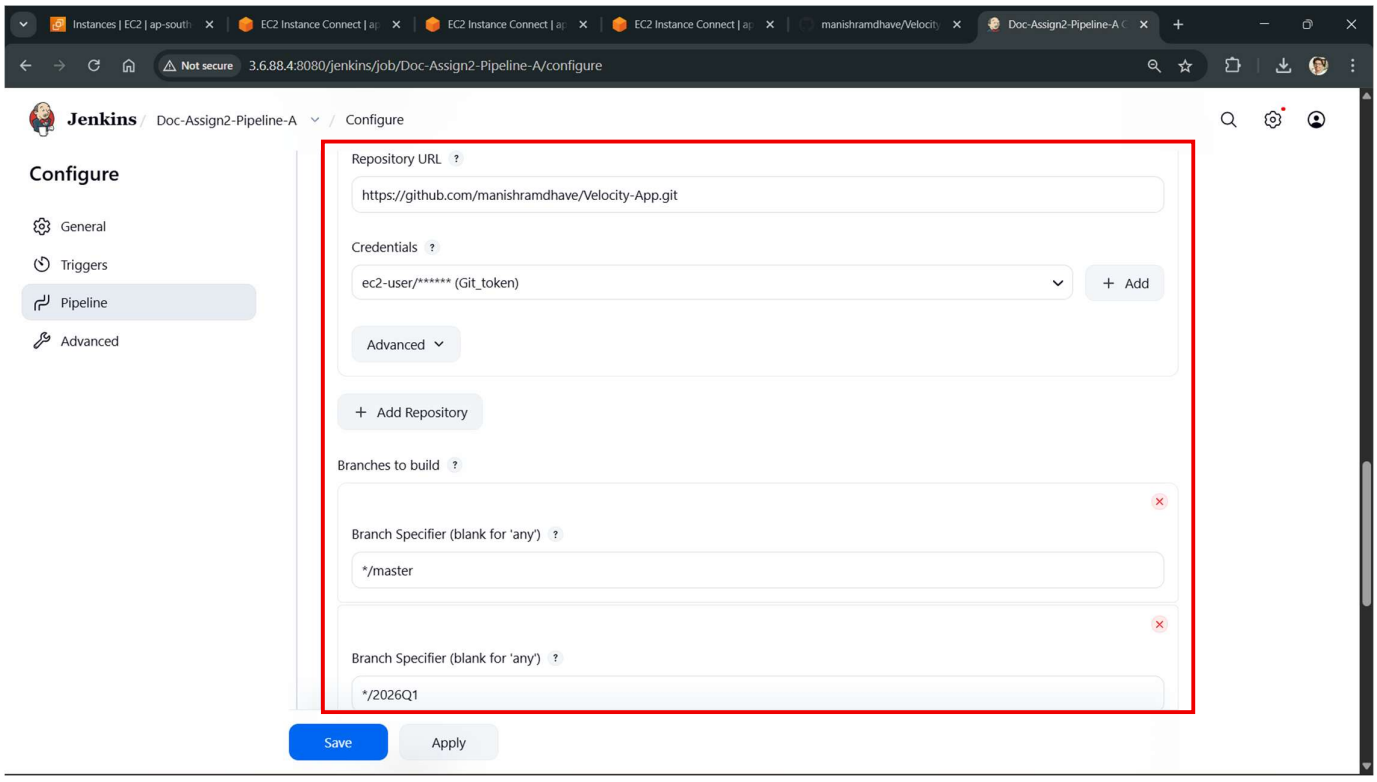
Step 8: Created two Nodes for to establish the connection between Jenkins Master and each Slave Instances using the **'Credential'** and **'Manually trusted key Verification Strategy'**:



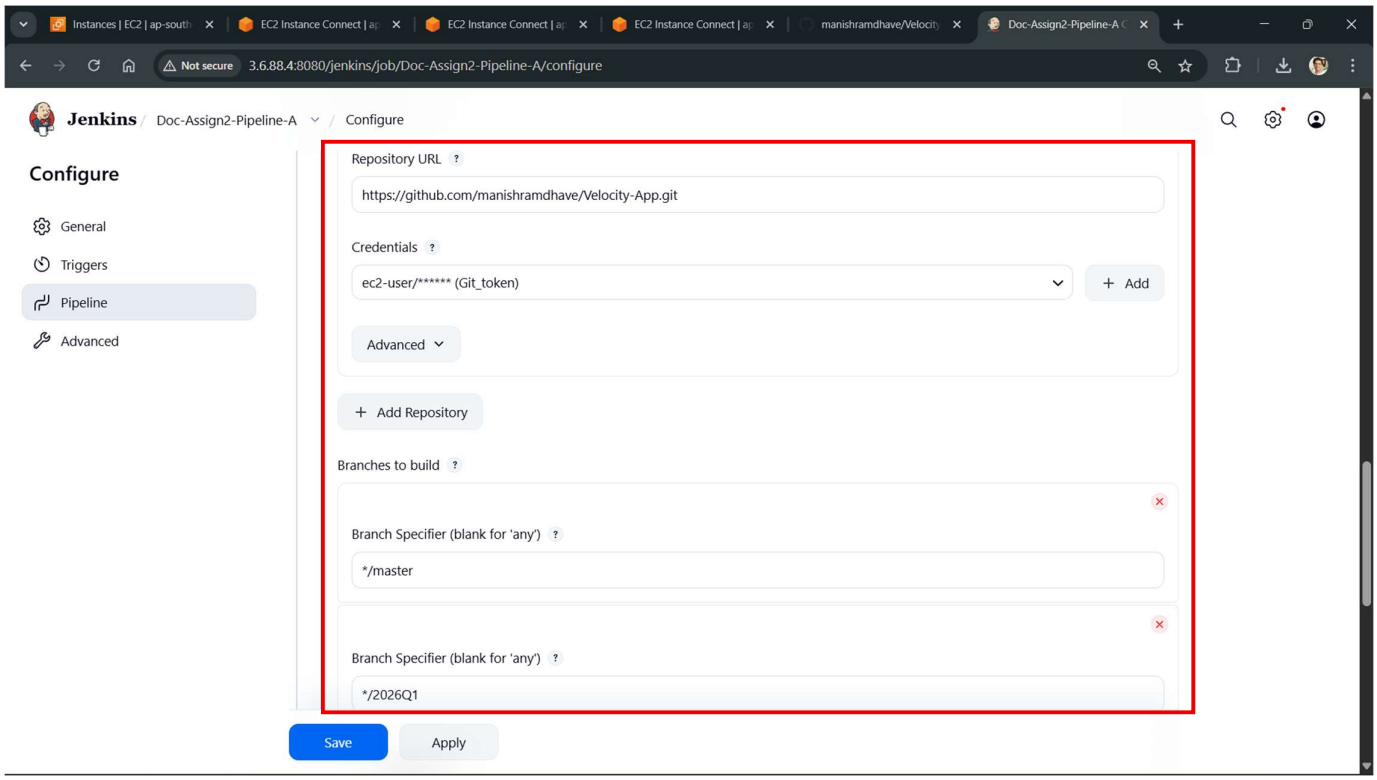
Step 9: Launched the Jenkins and created two different Pipeline Jobs. **Job1 and Job2**:



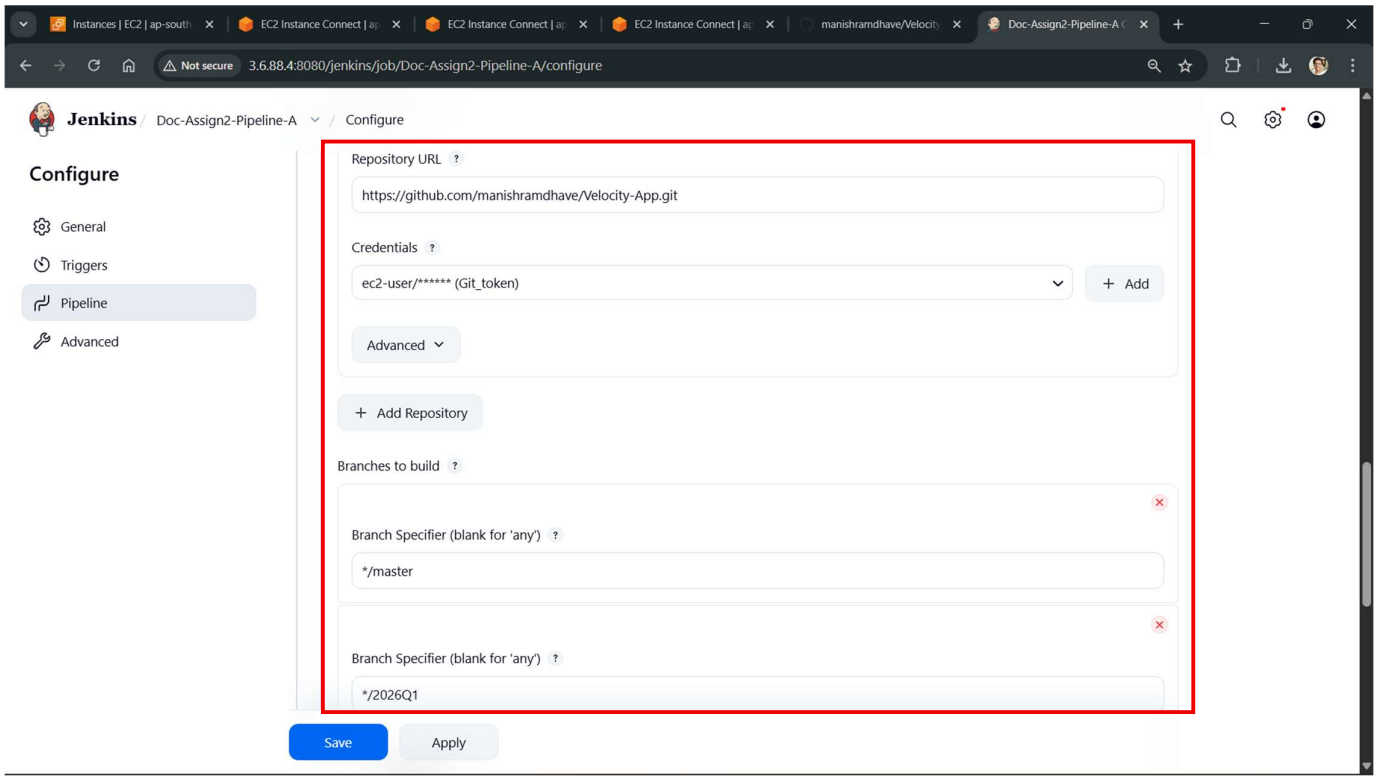
Step 10: Integrated Git branches with Jenkins by creating ‘Credentials’ by using the Git Token on both the pipeline jobs:



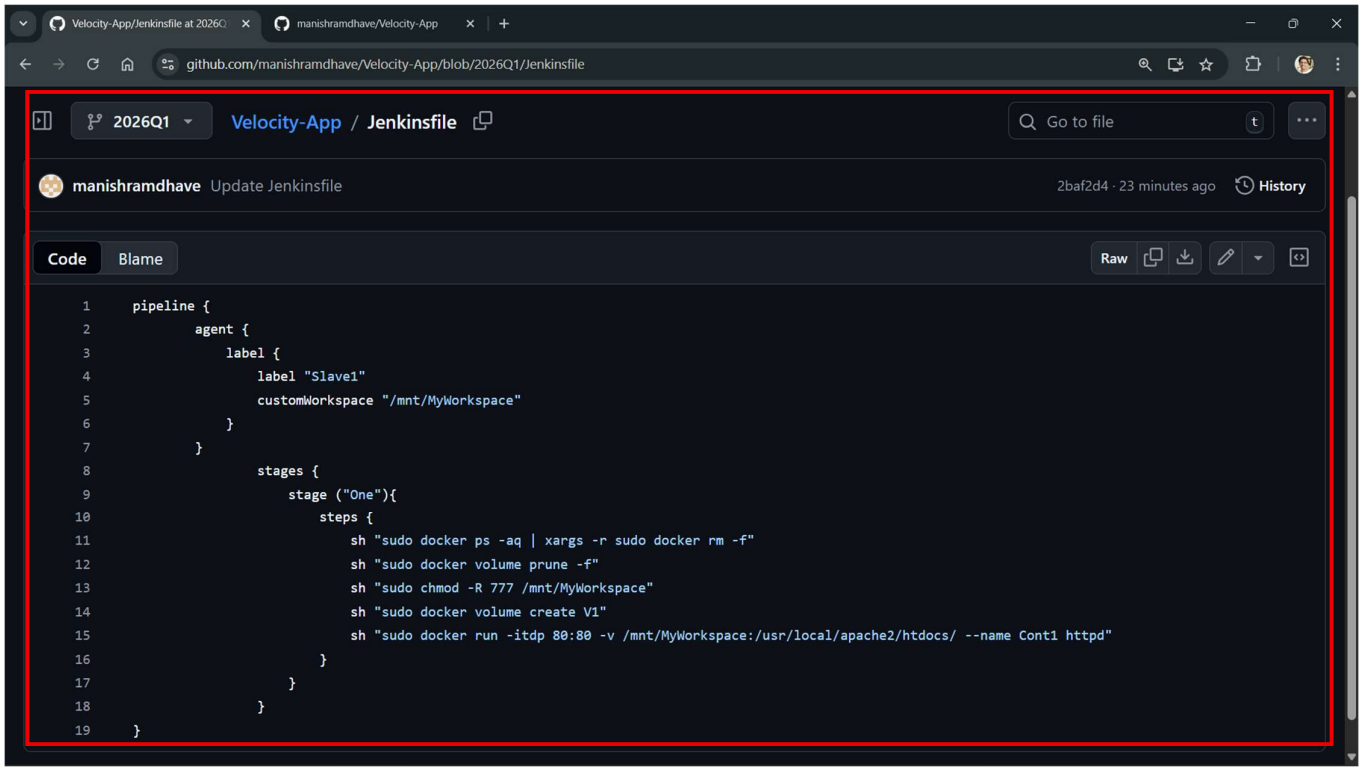
Step 11: Used **'Pipeline script from SCM'** and selected the SCM as a **'Git'** which will follow the Jenkins pipeline script by using the **'Jenkinsfile'** in the repository:



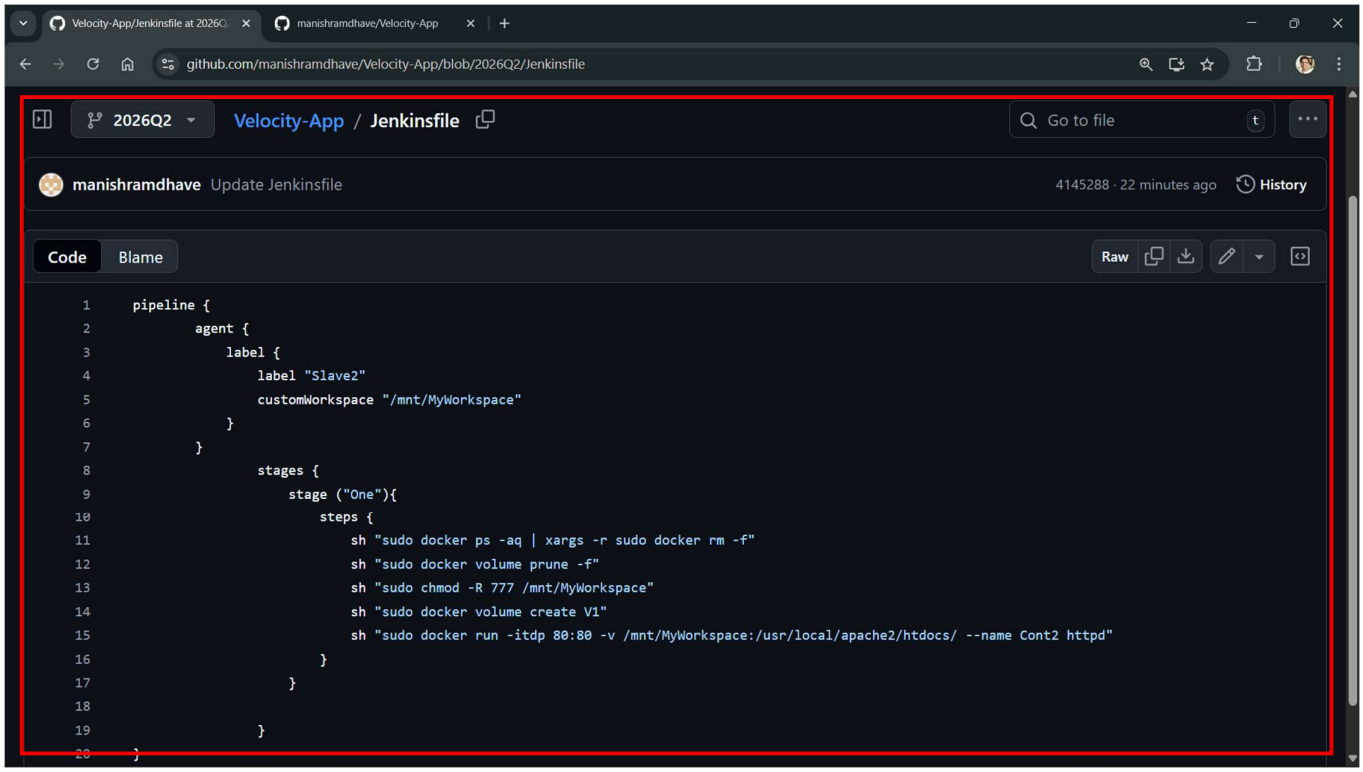
Step 12: Integrated Git branches, 2026Q1 and 2026Q2 with Jenkins by creating 'Credentials' by using the Git Token **on both the pipeline Job-A and Job-B** respectively:



Step 13: Created a **'Jenkinsfile' on 2026Q1 branch** in which out script is mentioned:

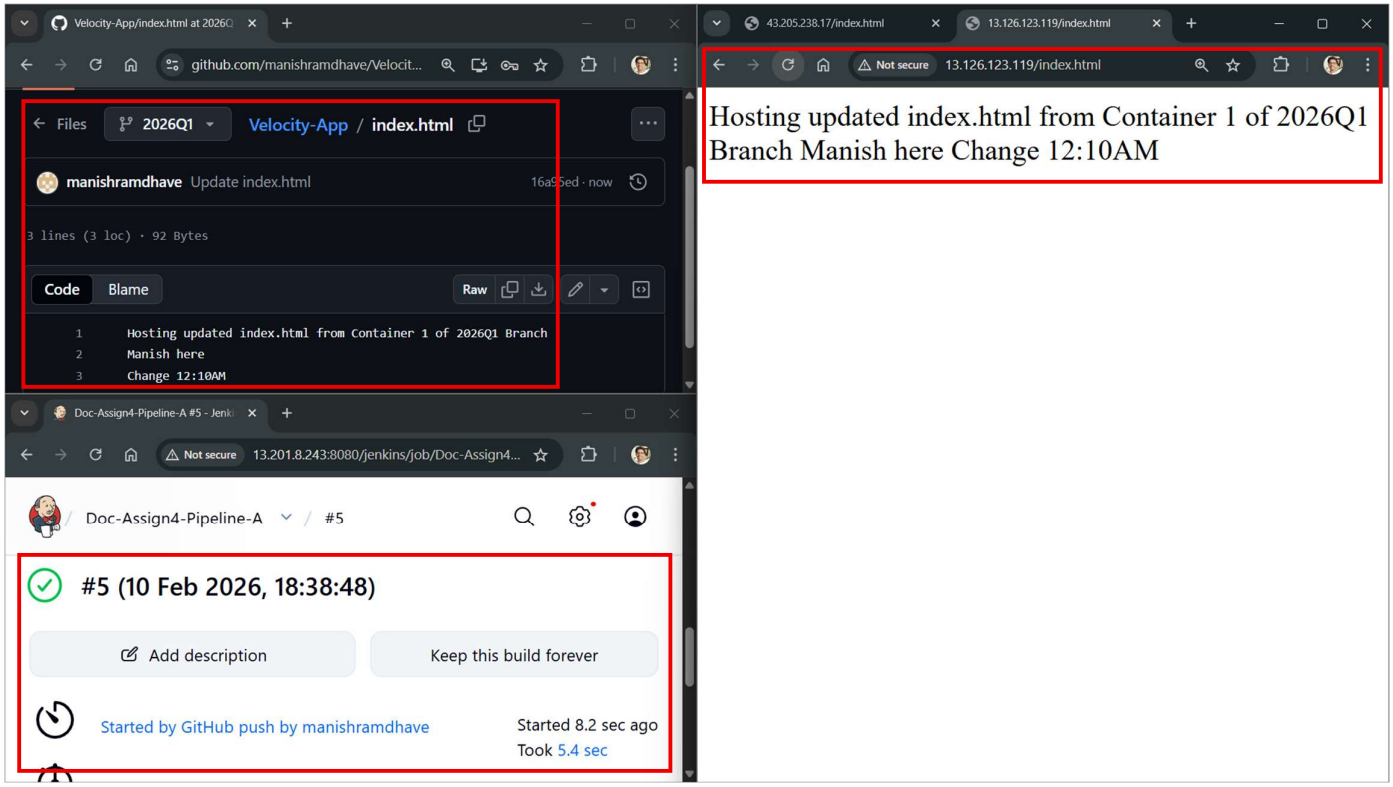


Step 14: Created a **'Jenkinsfile' on 2026Q2 branch** in which out script is mentioned:



Result:

1. When changes are done in 2026Q1 branch, Build is triggered by **'Doc-Assign4-Pipeline-A'** and the updated index.html file is hosted from the **container 'Cont1'** of a **Slave1 instance** by using the Pipeline script in the '**Jenkinsfile'** file of the same branch:



2. When changes are done in 2026Q2 branch, Build is triggered by **'Doc-Assign4-Pipeline-B'** and the updated index.html file is hosted from the **container 'Cont2'** of a **Slave2 instance** by using the Pipeline script in the '**Jenkinsfile'** file of the same branch: