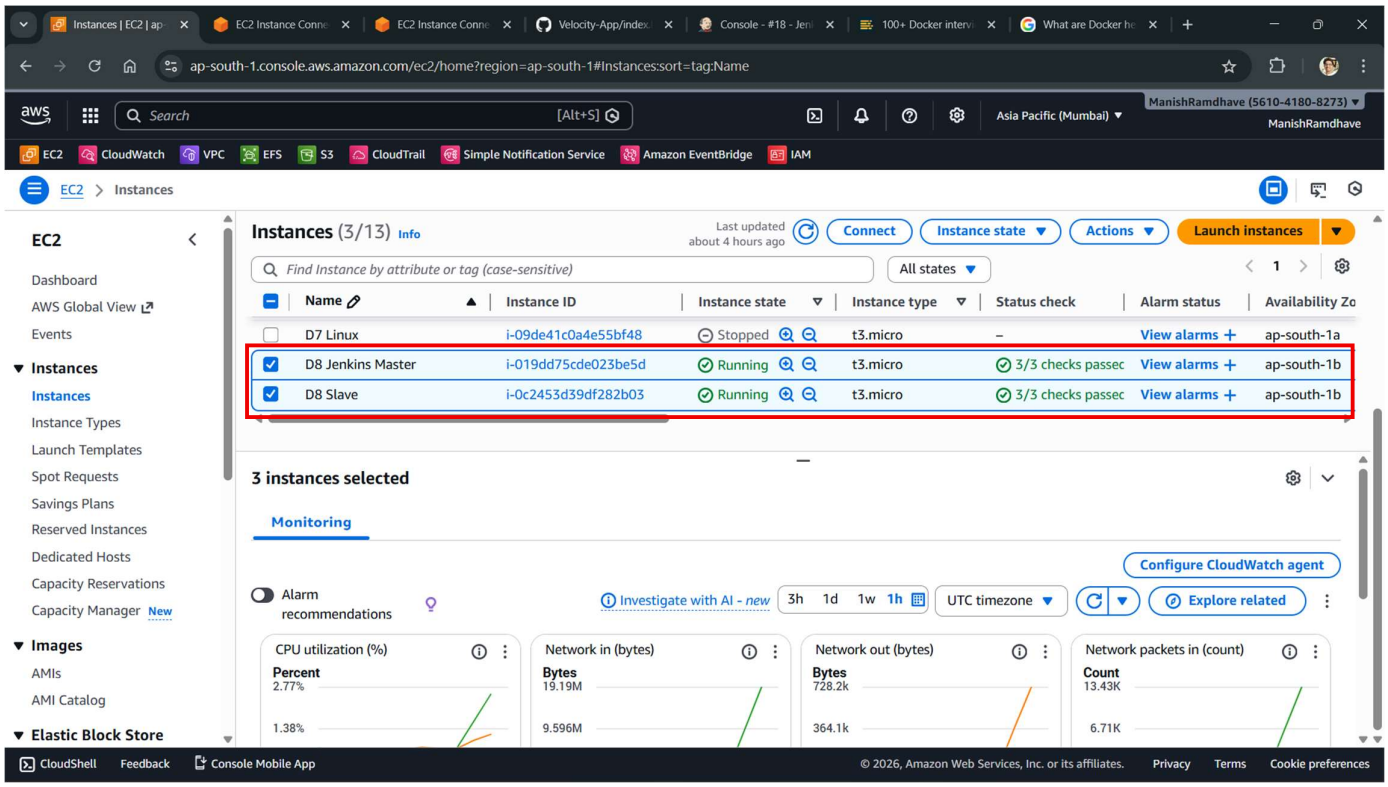
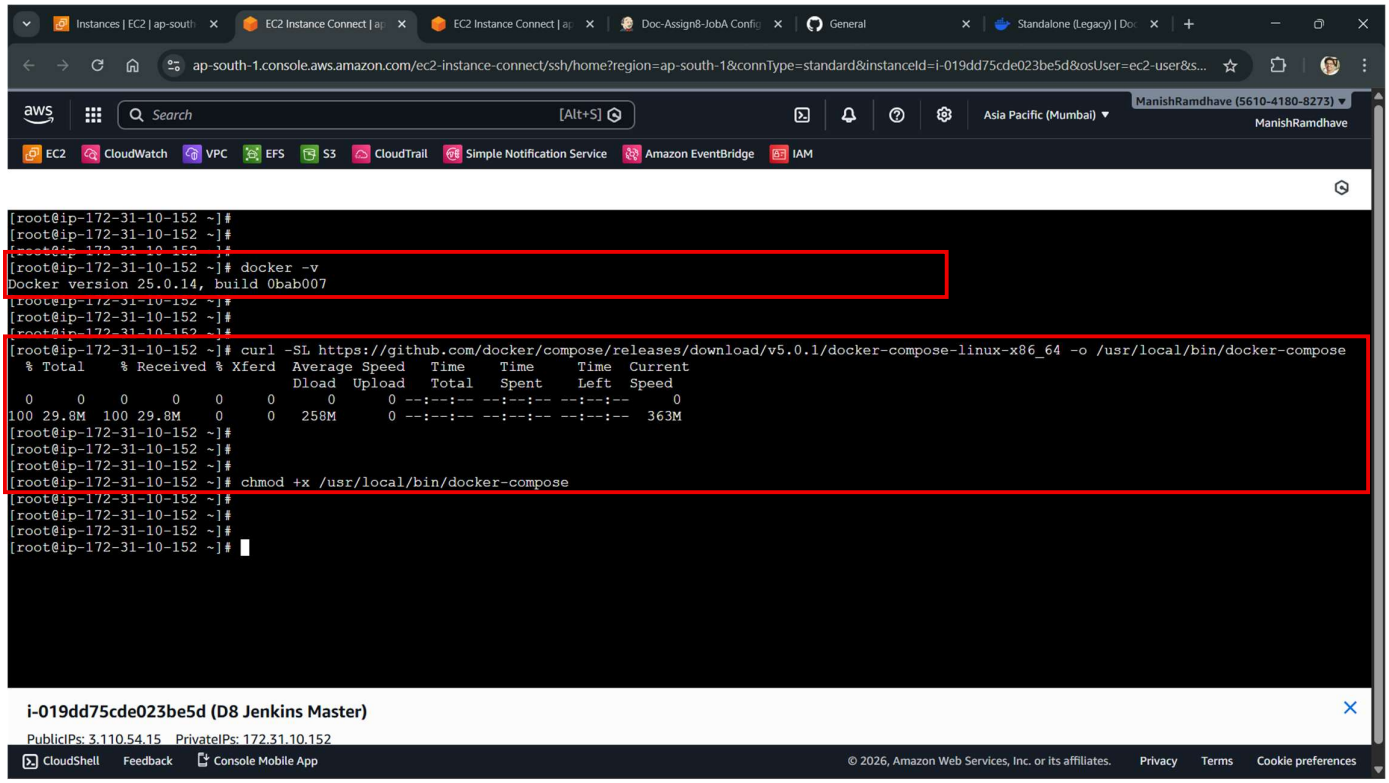
Docker Assignment 8 (Task 1)

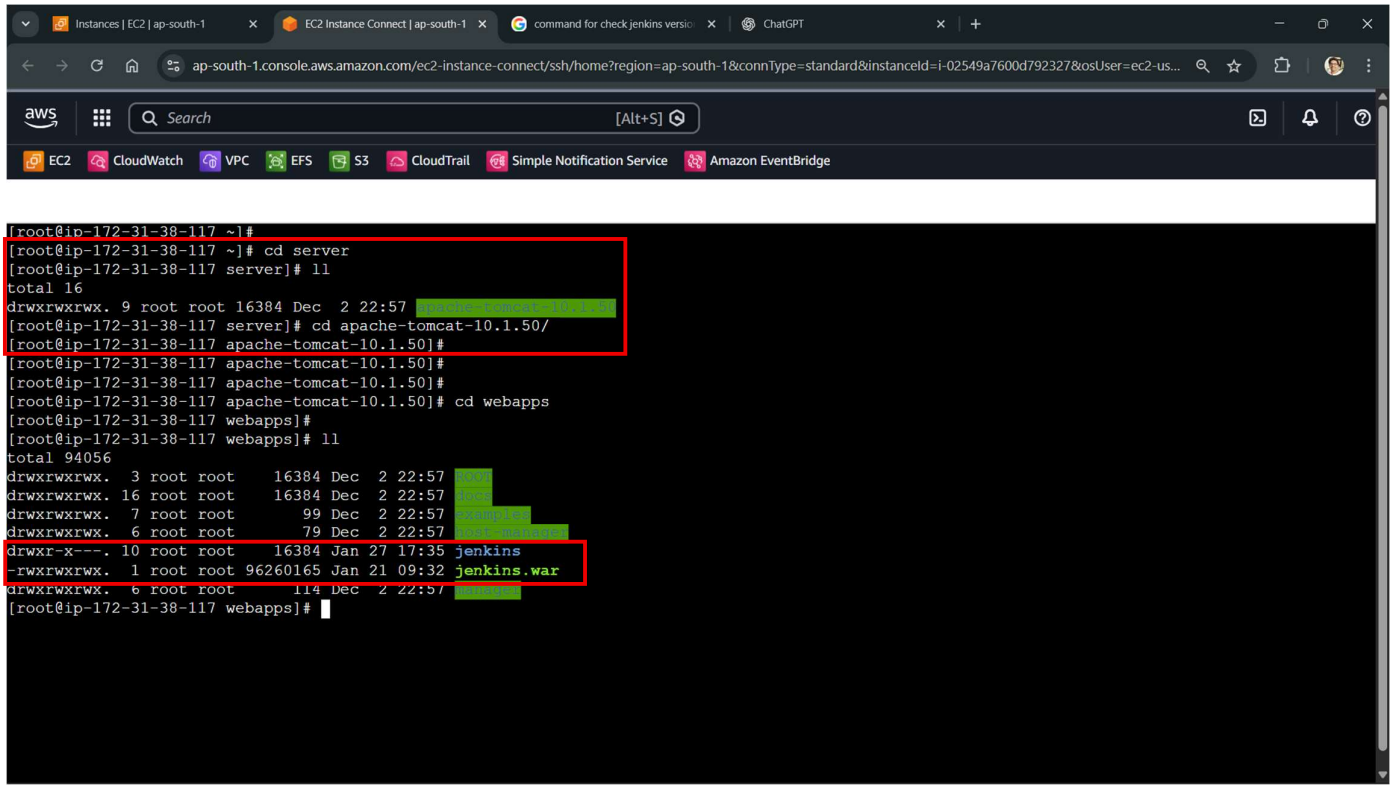
Step 1: Launched instances for our **Jenkins Master and Slave:**



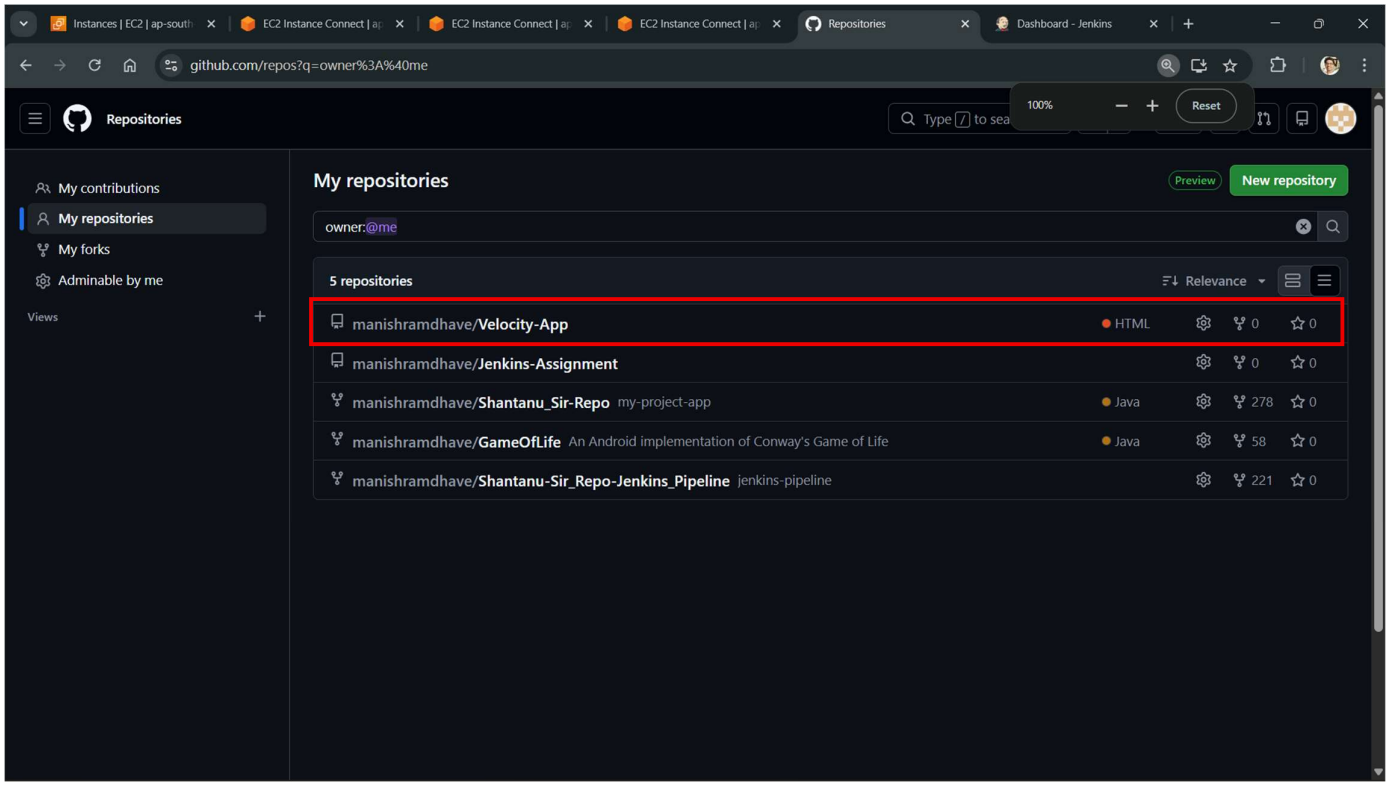
Step 2: Installed **Java-17** and **Docker** and **Docker Compose on the Jenkins Master Instance** and **Slave** also:



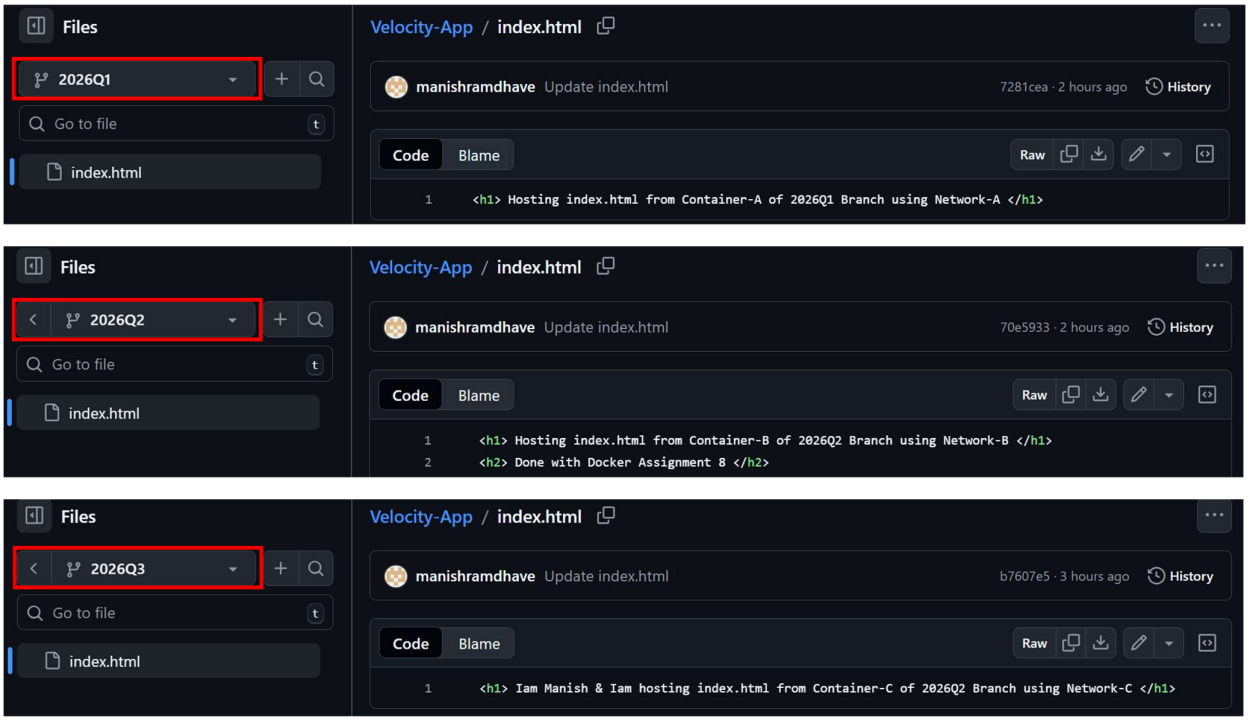
Step 3: Installed **Apache-Tomcat-10 and Jenkins** on the **Jenkins Master Instance**:



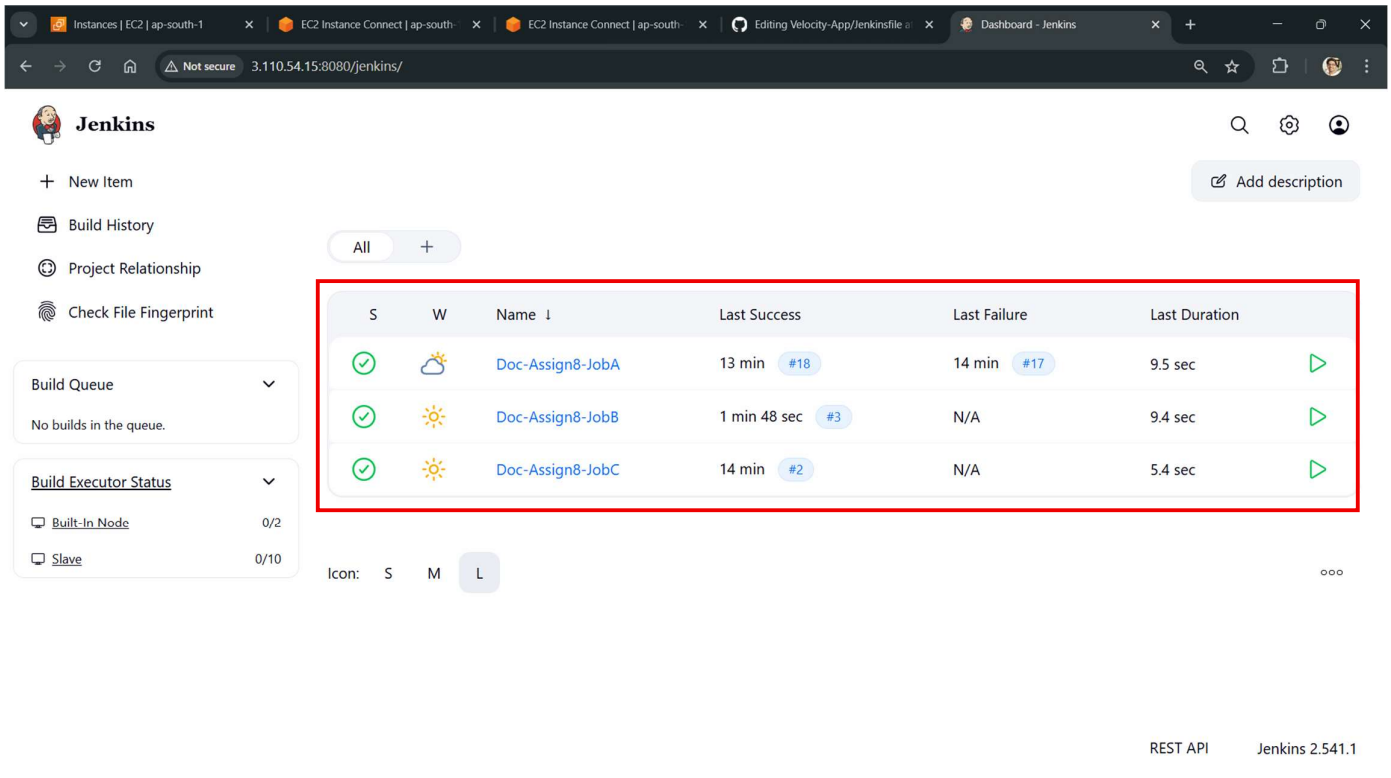
Step 4: Made a Private Repository named **'Velocity-App'** in GitHub account:



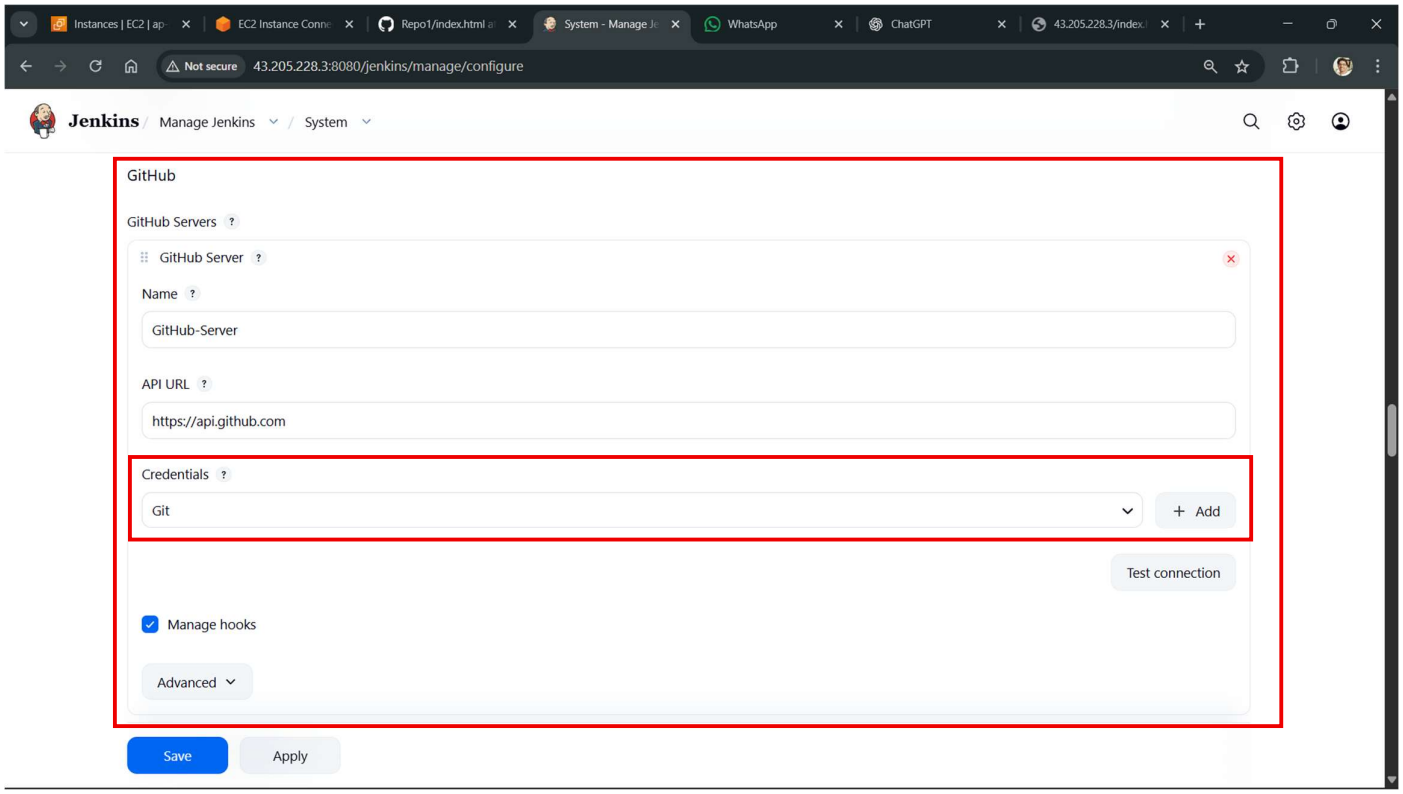
Step 5: Created three branches, **2026Q1, 2026Q2 and 2026Q3** in the '**Velocity-App**' Repository and pushed **three different 'index.html'** files in the respective branches:



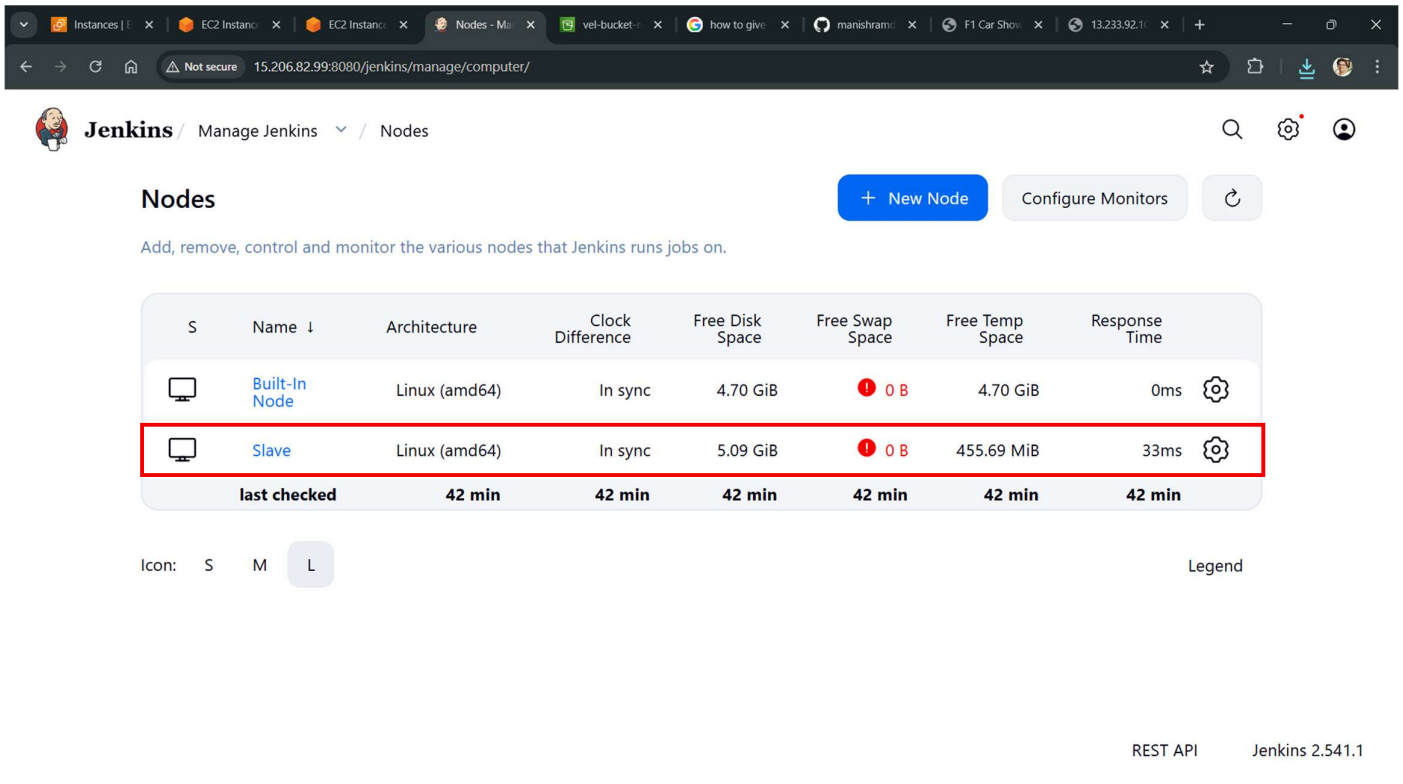
Step 6: Launched the Jenkins and created three different **Freestyle Jobs** in it:



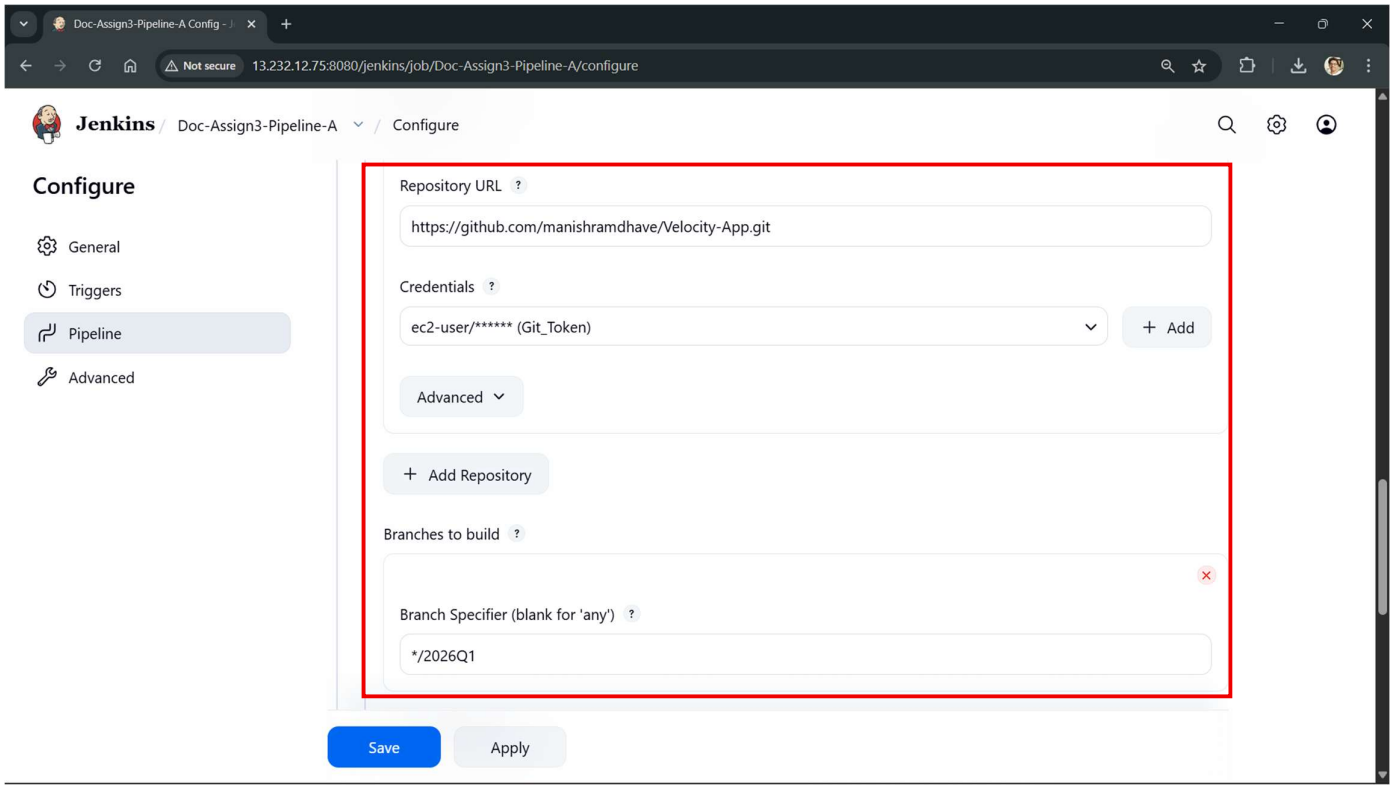
Step 7: Created an **API Connection between Jenkins to GitHub** Repositories in 'Manage Jenkins' by creating **a Secret Text (Credential)** using a GitHub Token in Jenkins:



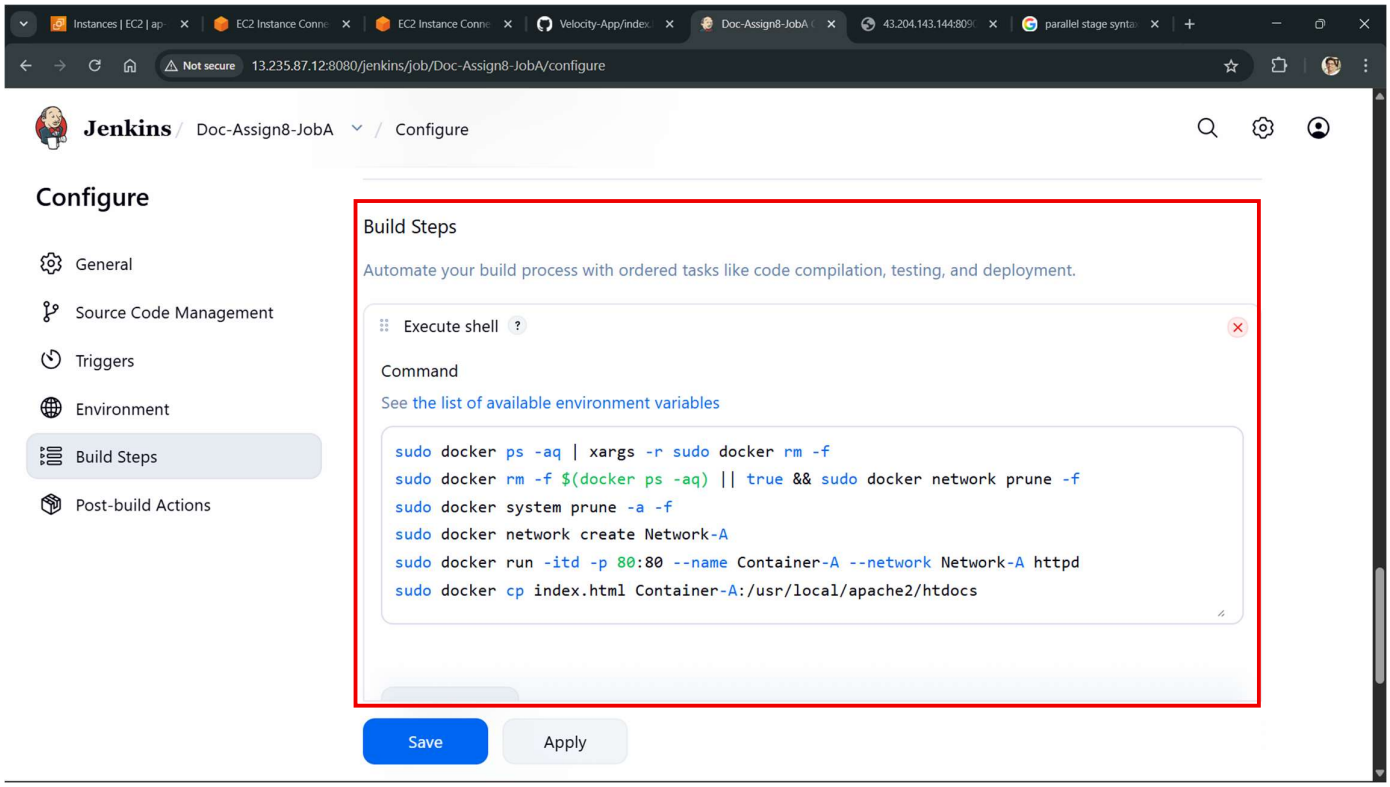
Step 8: Created an '**Node' Connection between Jenkins Master and Slave instances** 'Manage Jenkins' by creating **a SSH Username and Key (Credential)** using a Key-Pair and **Manually trusted key-verification Strategy**:



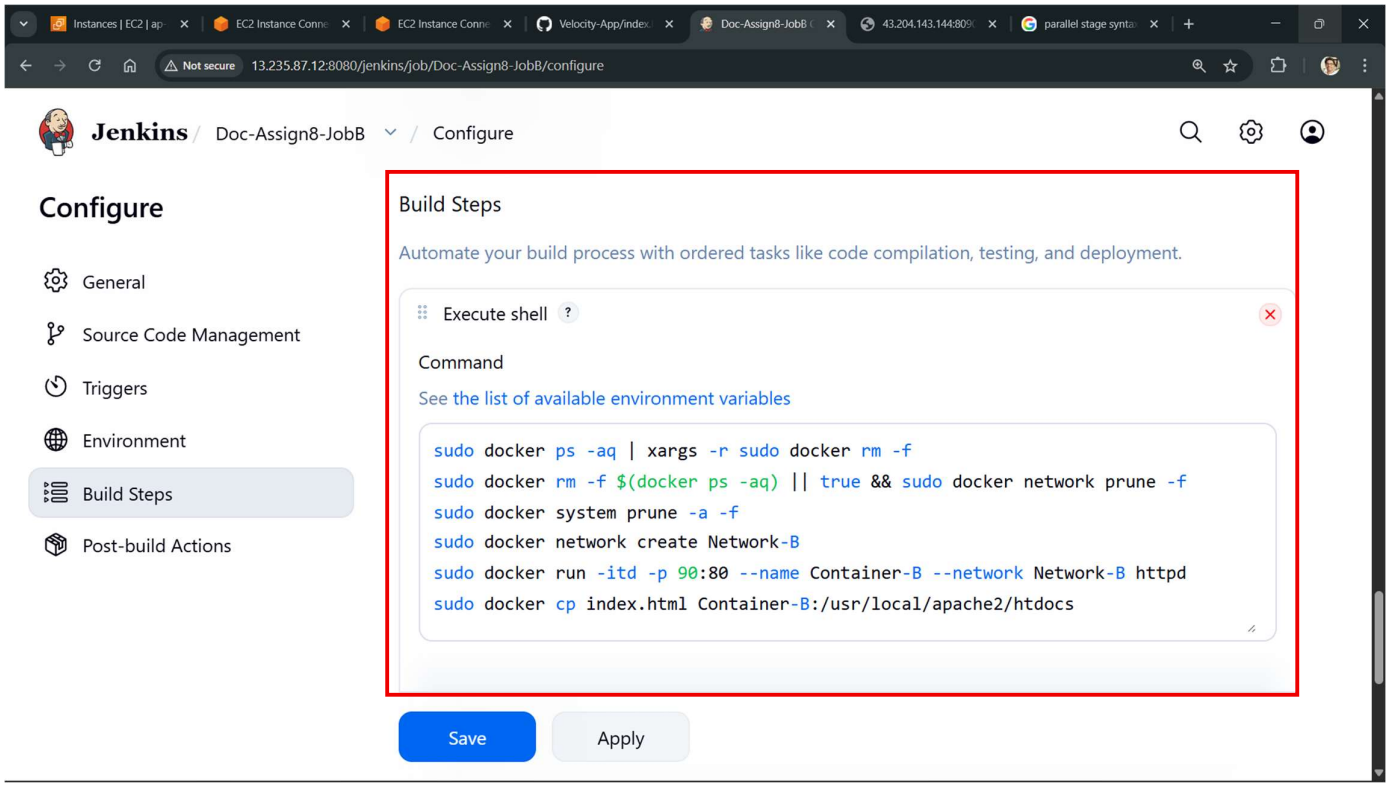
Step 9: Integrated all Git branches, **2026Q1, 2026Q2 and 2026Q3** with Jenkins by creating 'Credentials' by using the Git Token **on all the Jobs** respectively:



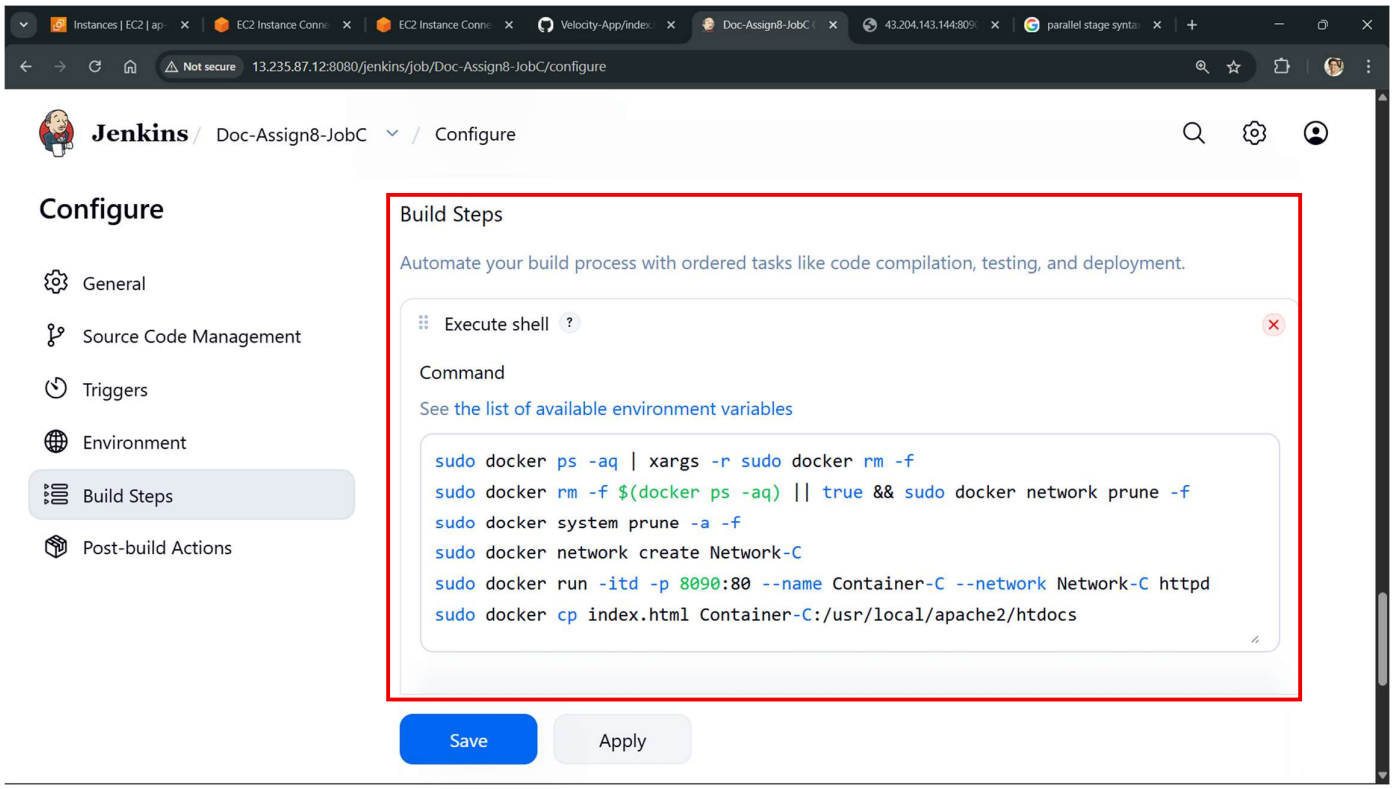
Step 10: In **Build Steps of Doc-Assign8-JobA,** we have executed the following shell commands for **Network-A**:



Step 11: In **Build Steps of Doc-Assign8-JobB,** we have executed the following shell commands for **Network-B**:

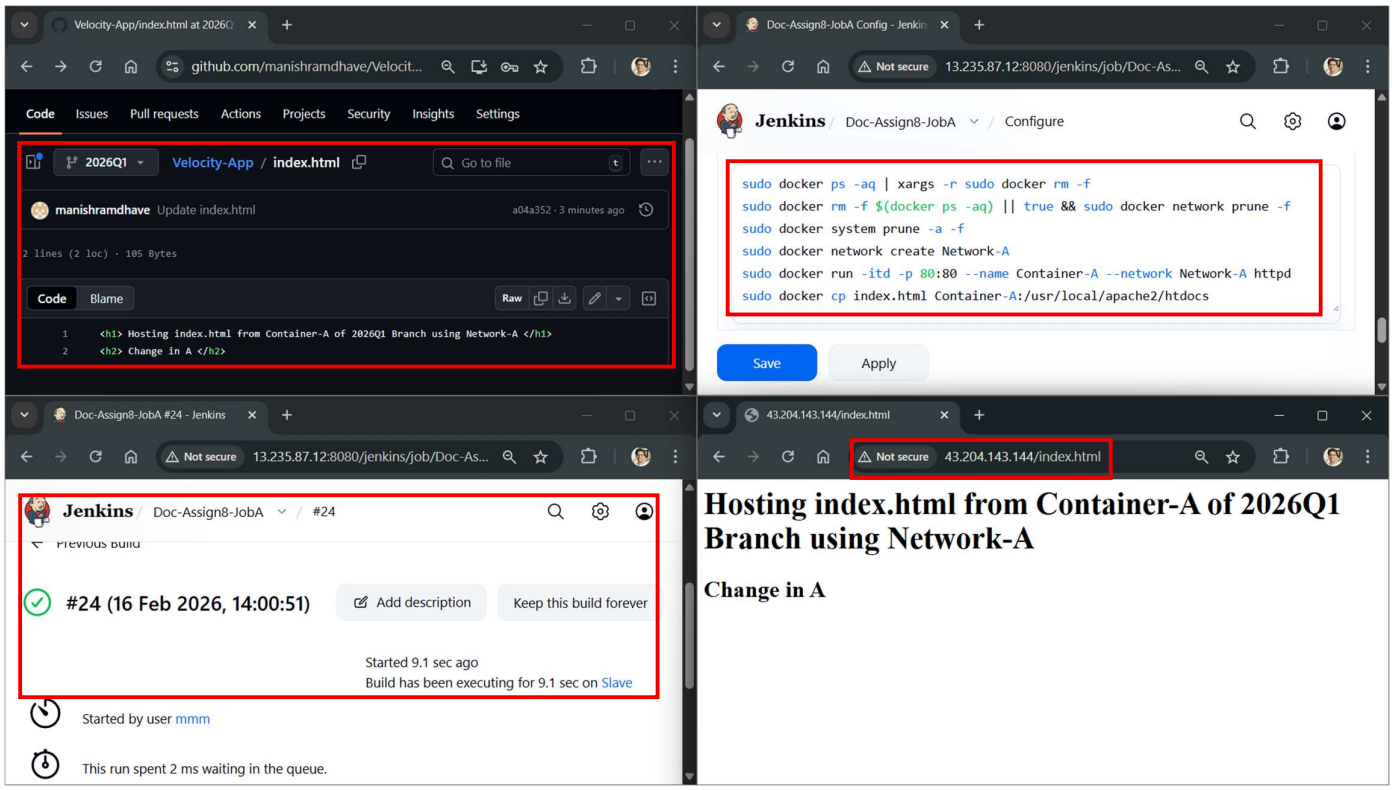


Step 12: In **Build Steps of Doc-Assign8-JobC,** we have executed the following shell commands for **Network-C**:

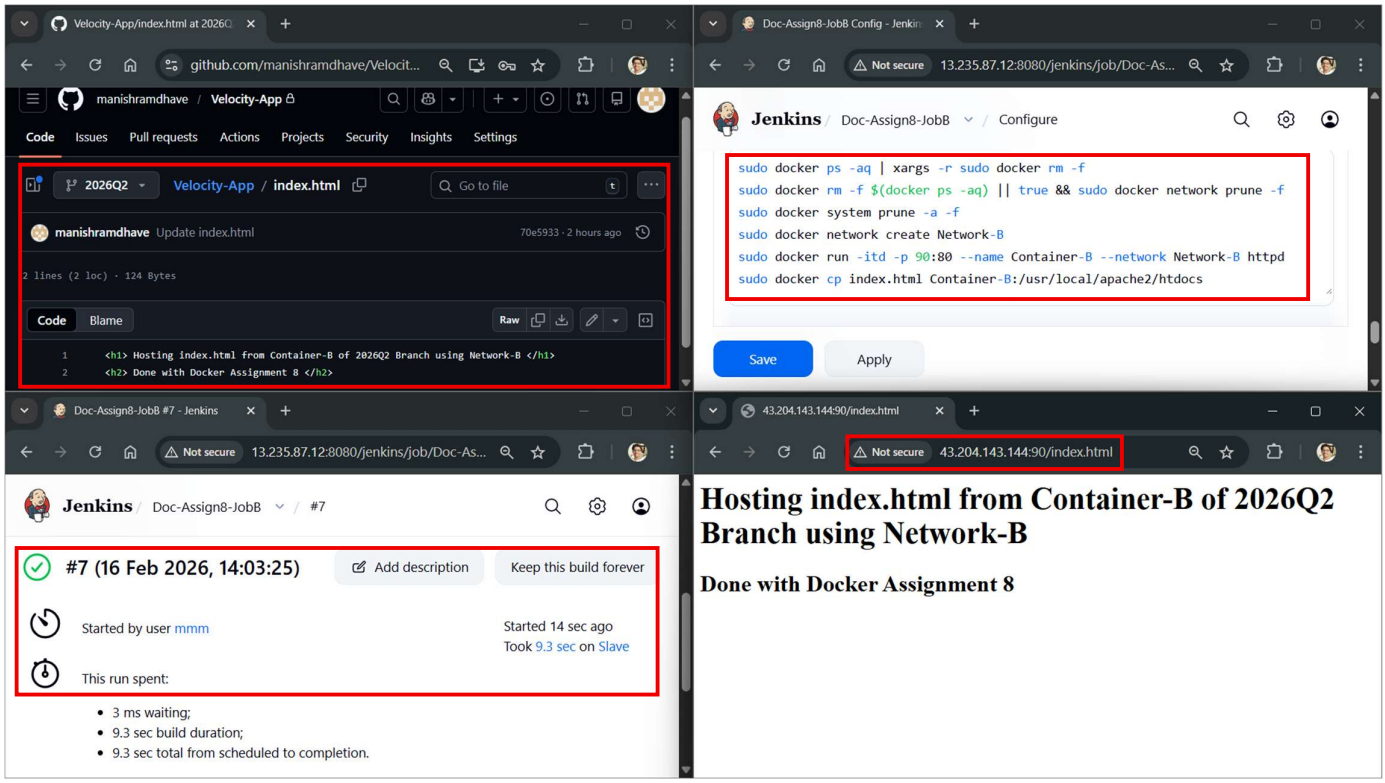


Results:

1. When changes are done in **2026Q1 branch**, Build is triggered by **'Doc-Assign8-JobA'** and the updated index.html file is hosted from the **'Container-A'** of **'Network-A'** by following the shell script in the **'Build Steps'** file of the same branch and hosted the using **Port No.80**:



2. When changes are done in **2026Q2 branch**, Build is triggered by **'Doc-Assign8-JobB'** and the updated index.html file is hosted from the **'Container-B'** of **'Network-B'** by following the shell script in the **'Build Steps'** file of the same branch and hosted the using **Port No.90**:



3. When changes are done in **2026Q3 branch**, Build is triggered by **'Doc-Assign8-JobC'** and the updated index.html file is hosted from the **'Container-C'** of **'Network-C'** by following the shell script in the **'Build Steps'** file of the same branch and hosted the using **Port No.8090**: