**Name: Dileep Kumar K S**

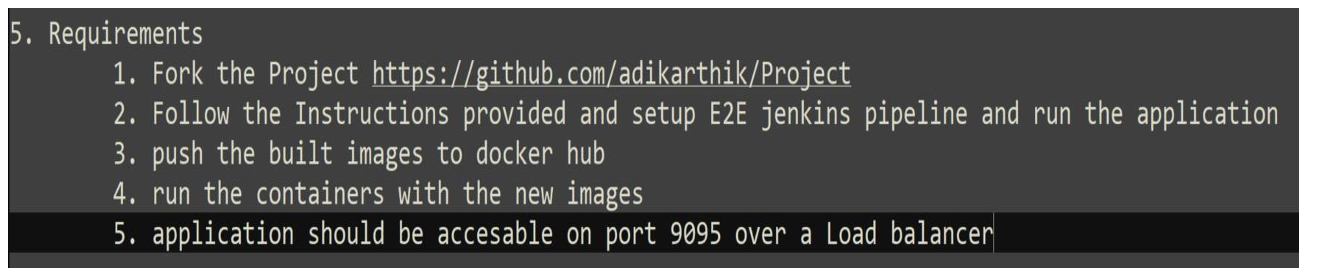
**4th Evaluation**

**Date: 19-04-2025**

**Time: 7:30 AM to 9:00 AM**

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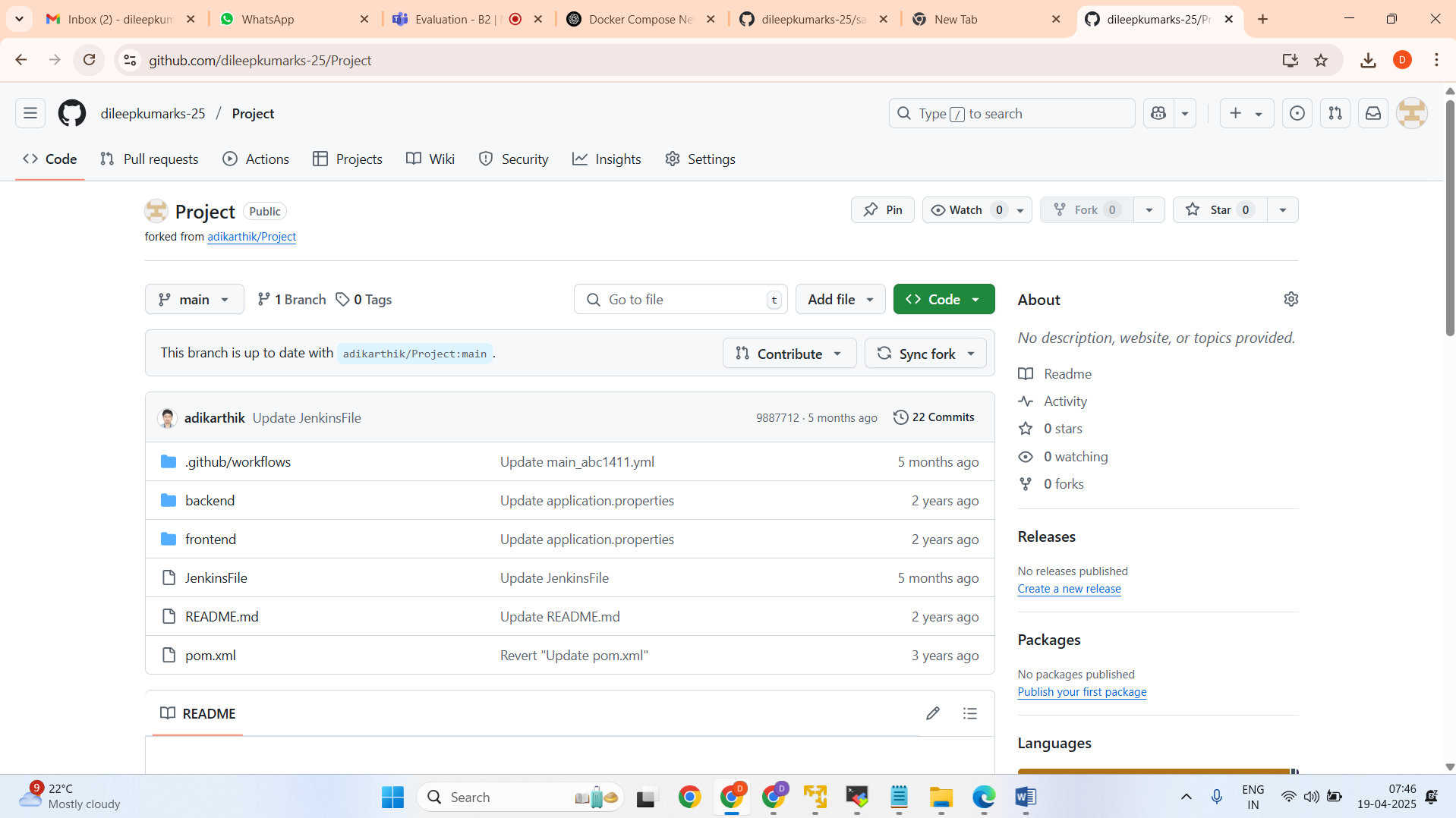
**Question no: 5**



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**1. Fork the project**

<https://github.com/adikarthik/Project>



**2. Set up E2E Jenkins pipeline and run the application**

Script:

pipeline {

agent any

stages {

stage(‘cloneProject’) {

steps {

git branch:’main’, url:’https://github.com/dileepkumarks-25/Amazon-Jenkins'

}

}

stage(‘clean’) {

steps {

sh ‘mvn clean’

}

}

stage(‘compile’) {

steps {

sh ‘mvn compile’

}

}

stage(‘test’) {

steps {

sh ‘mvn test’

}

}

stage(‘build’) {

steps {

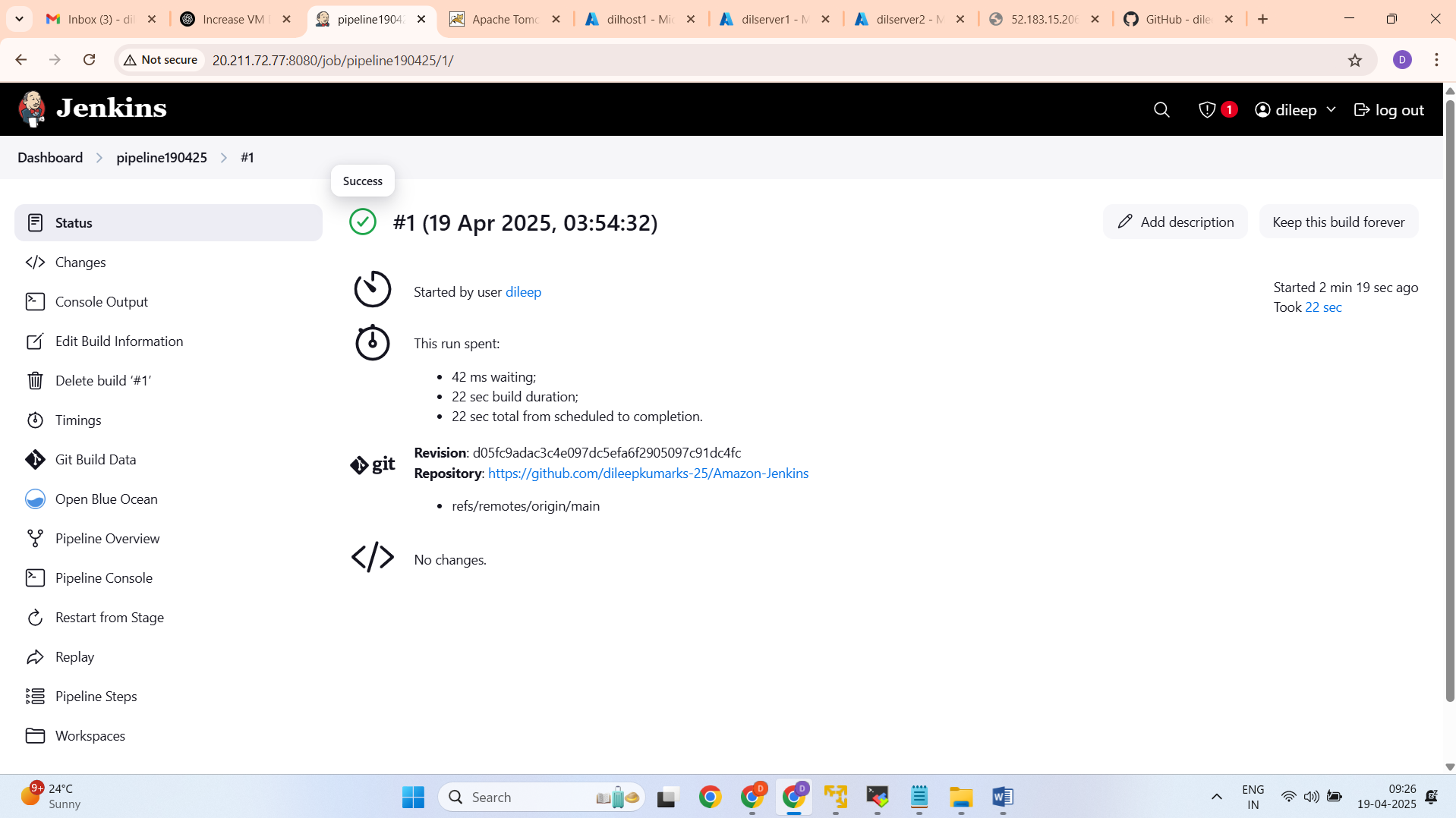
sh ‘mvn clean install’

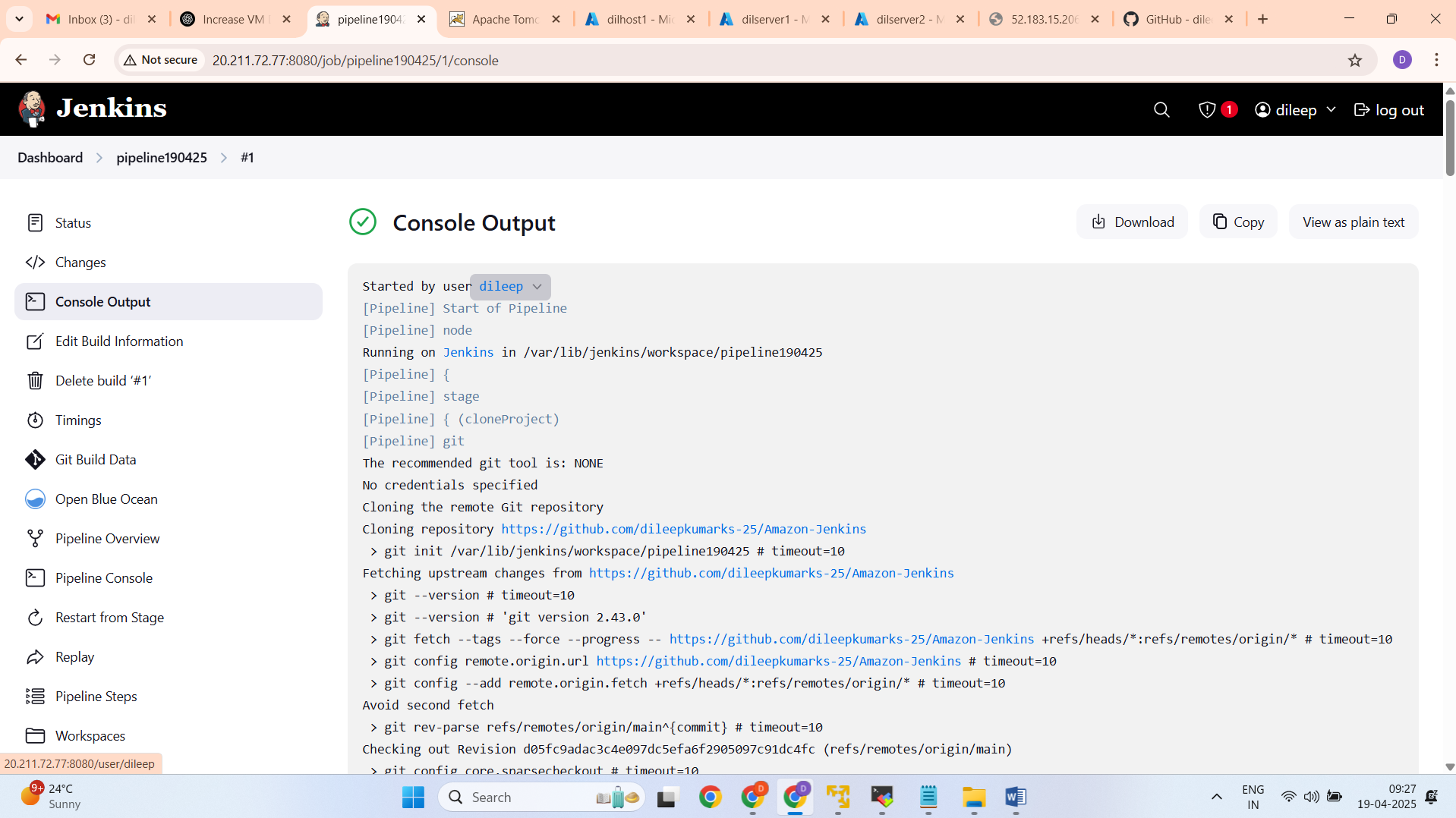
}

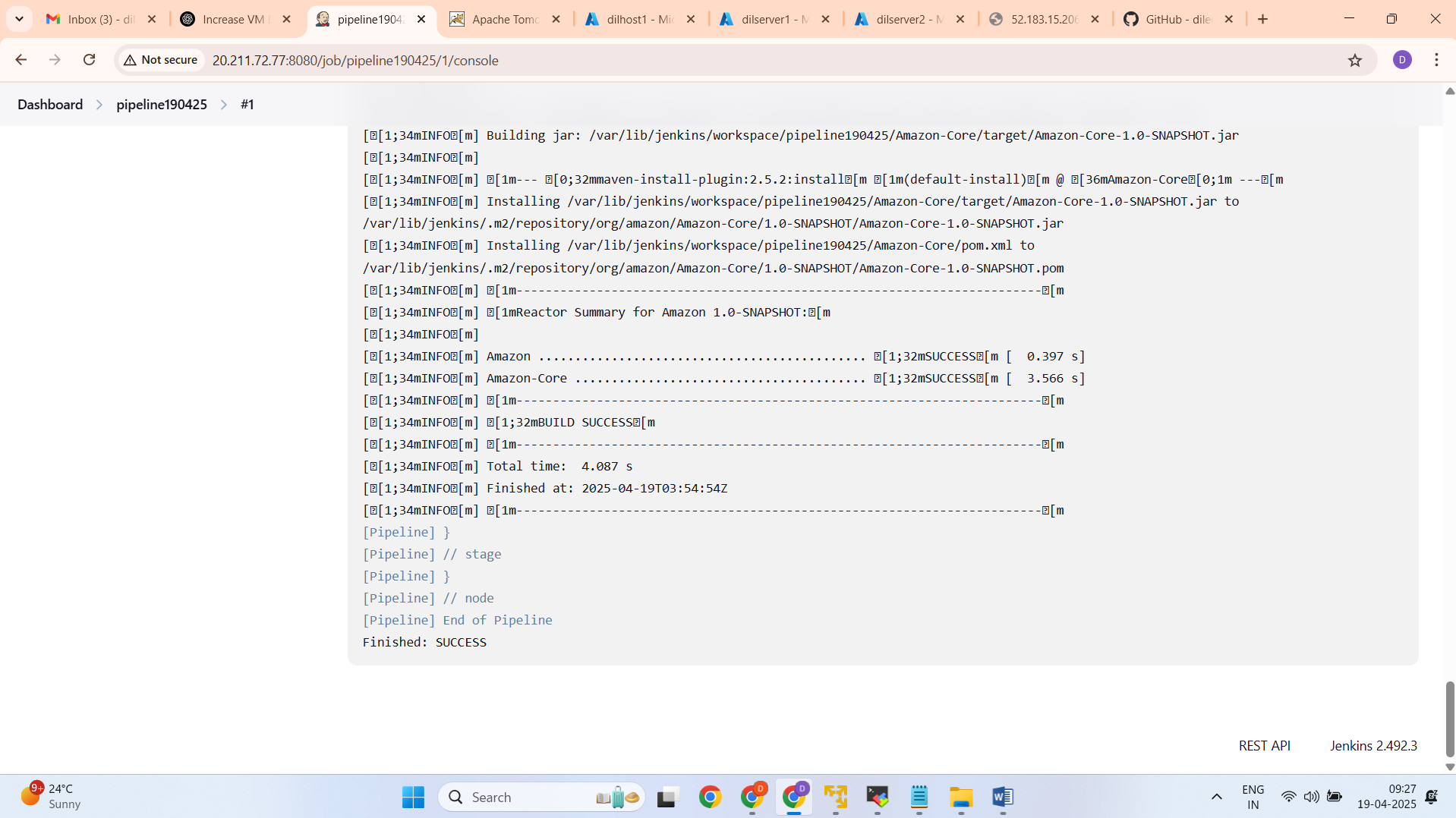
}

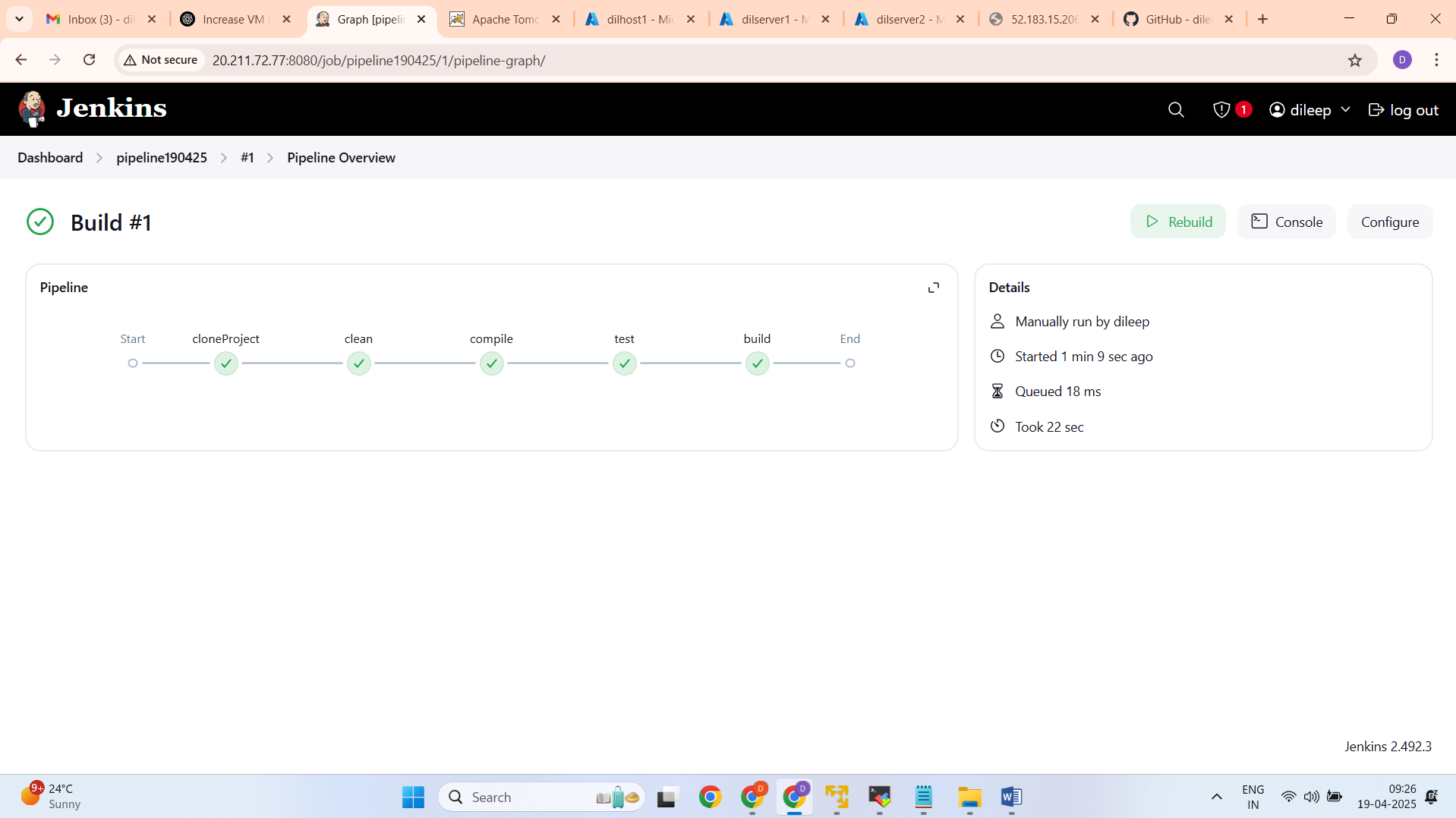
}

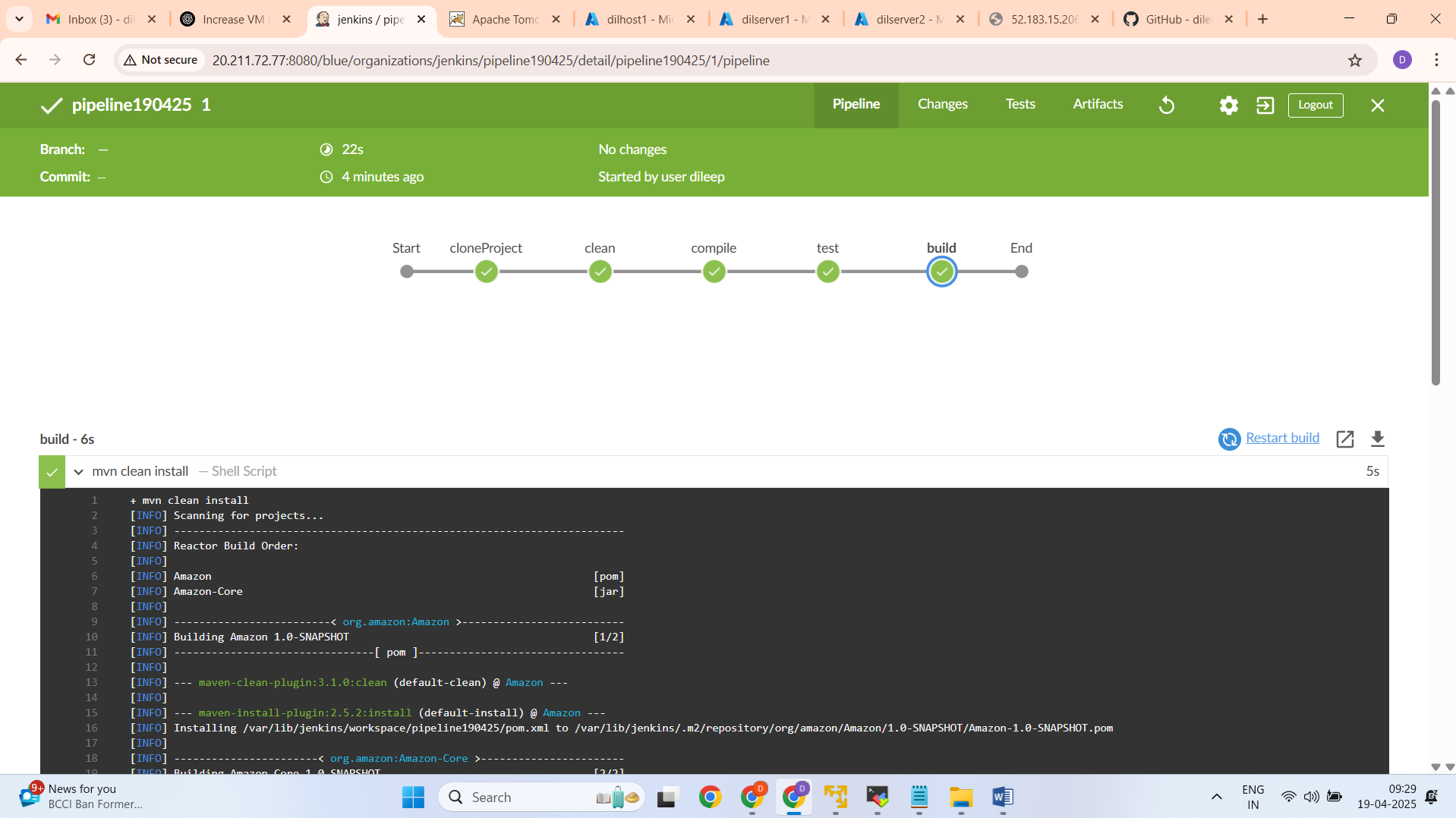
}





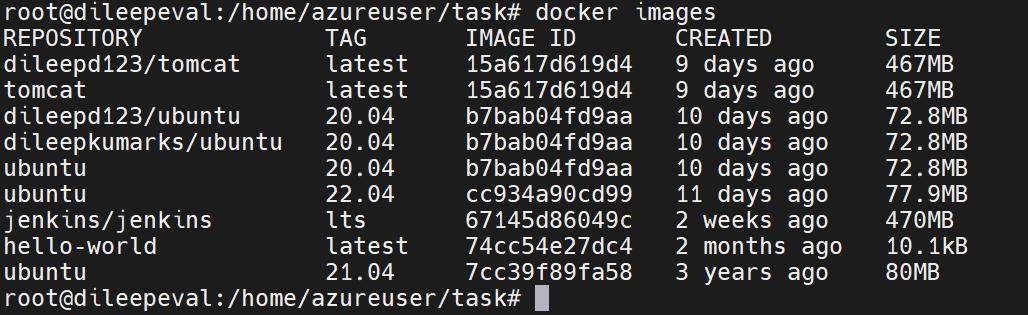


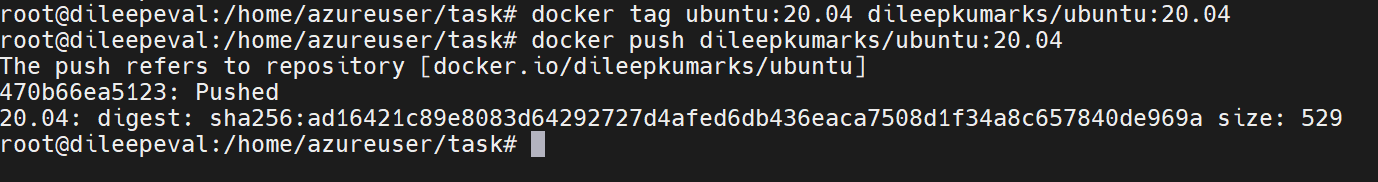


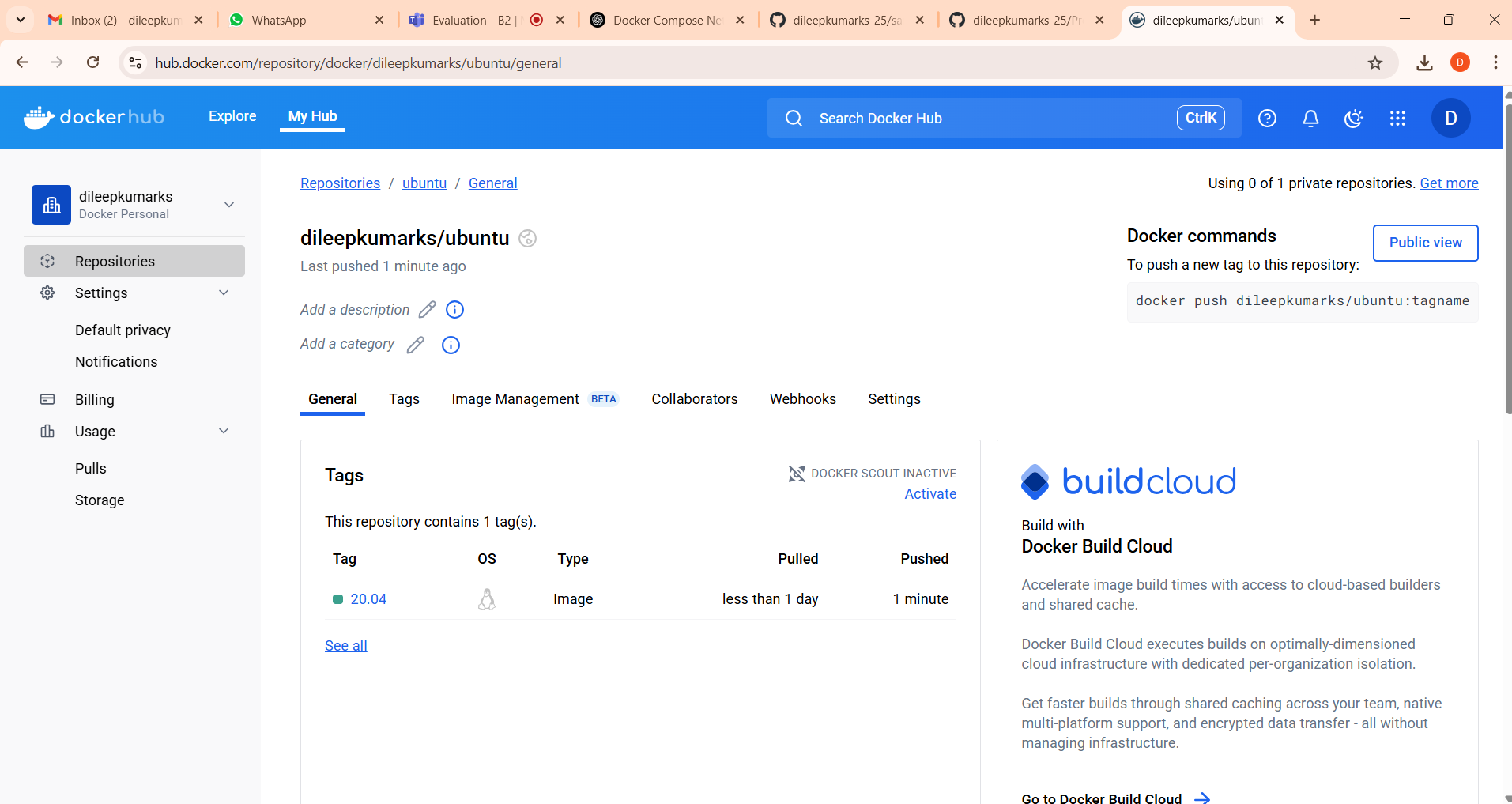




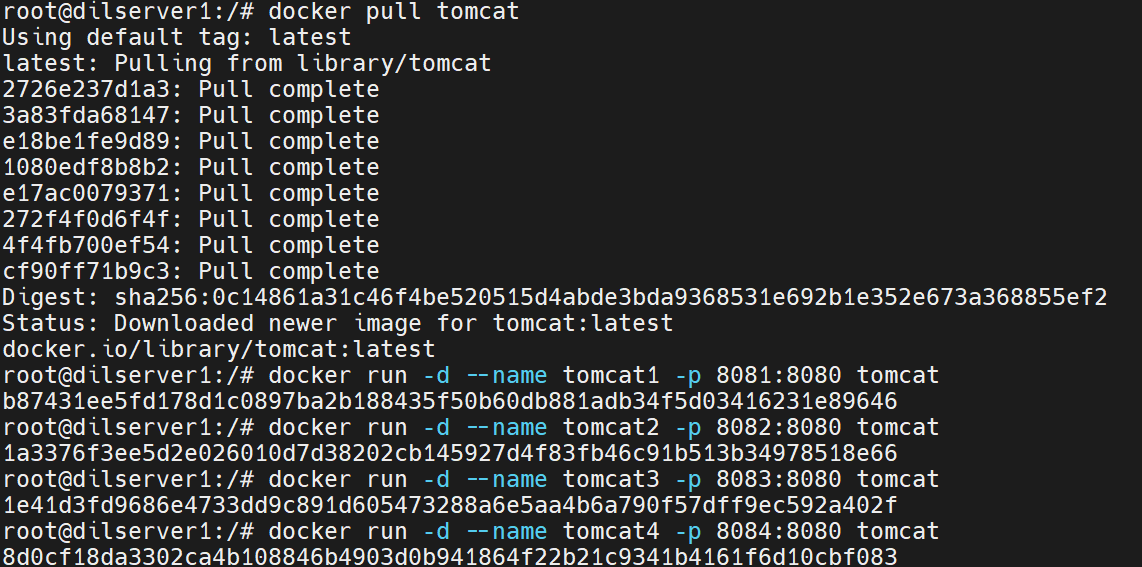
**3. Push the built images to docker hub**

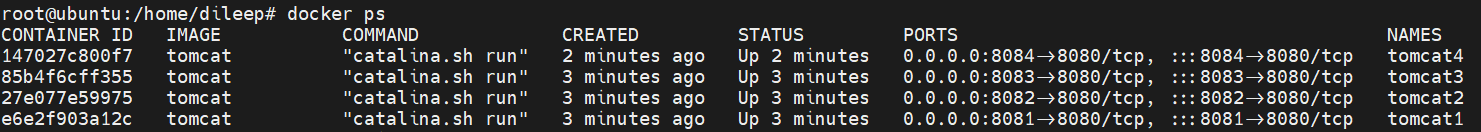


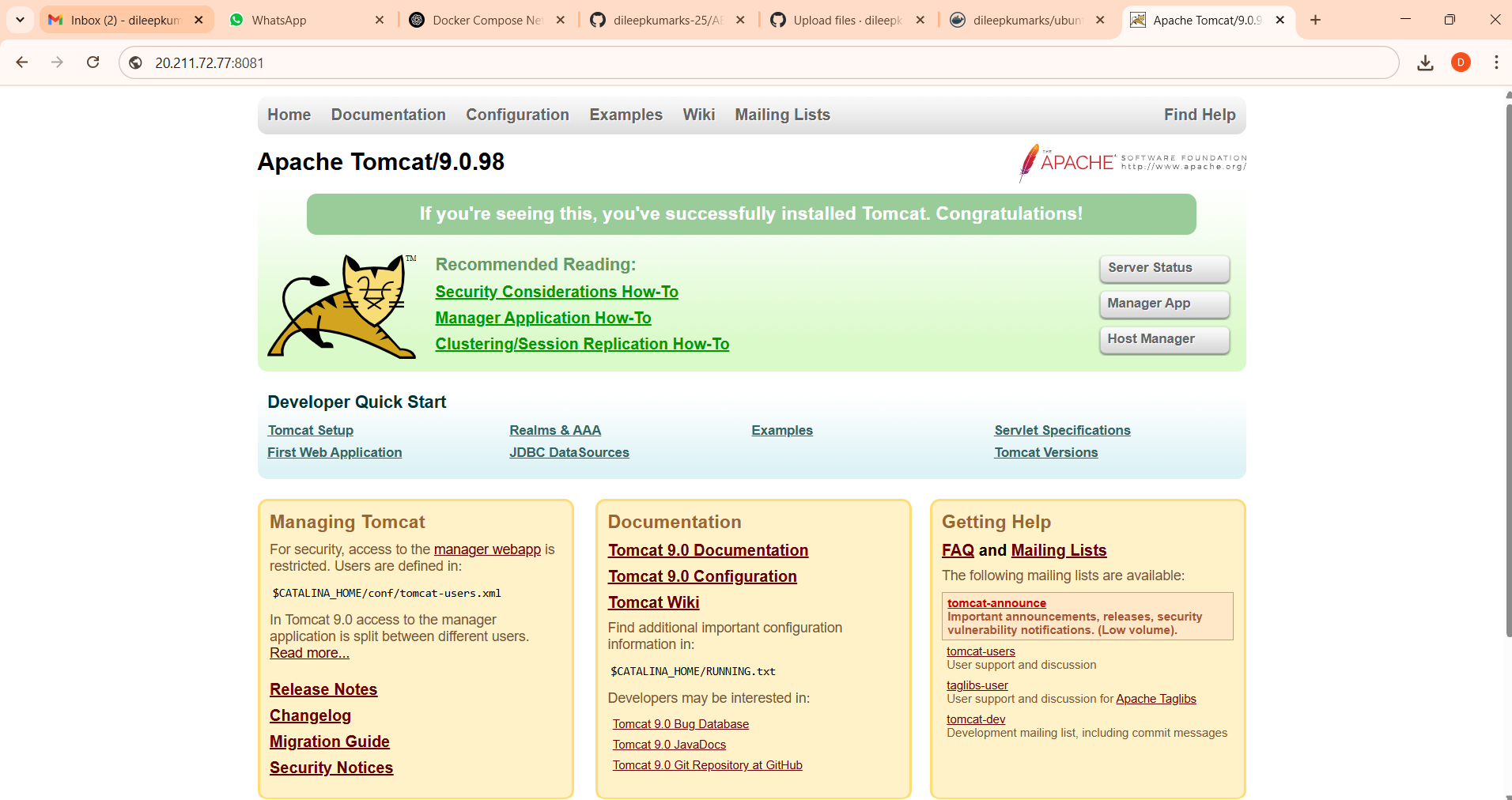


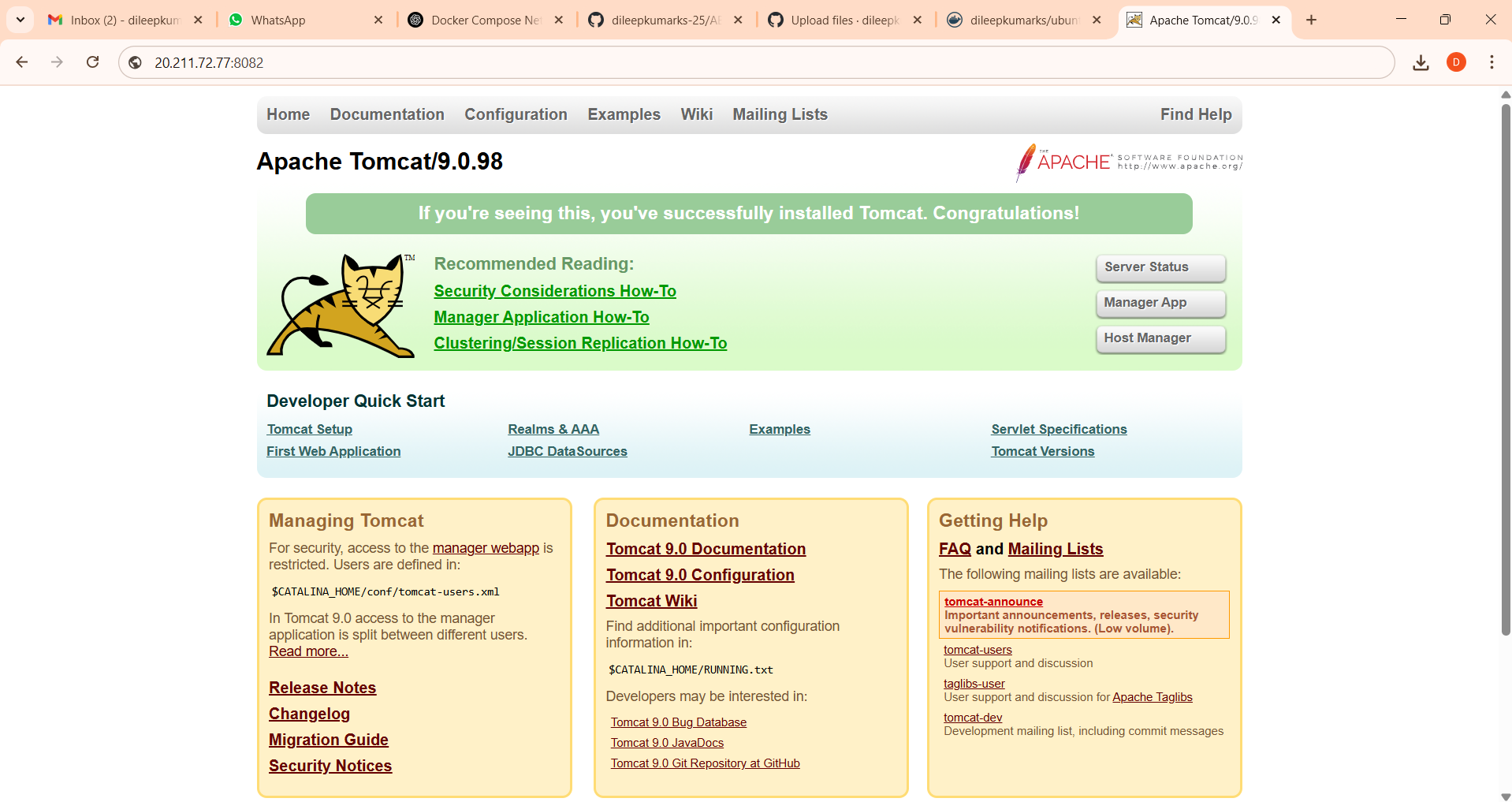


**4. Run the container with new images**





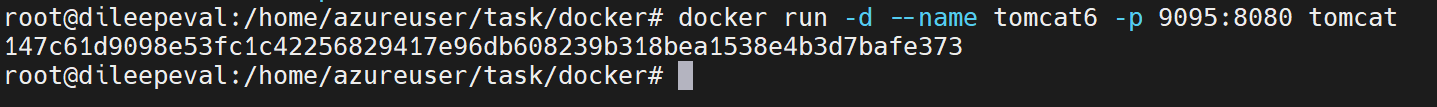




**5. Application should be accessible on port 9095 over the load balancer**

Run the Tomcat Container on Port 9095

docker run -d --name tomcat6 -p 9095:8080 tomcat



Set Up the Load Balancer (Nginx):

sudo nano /etc/nginx/sites-available/default

code: Nginx Configuration

http {

upstream tomcat\_servers {

server 127.0.0.1:9095; # Port 9095, where your container is exposed

# Add more servers if you have multiple containers to load balance

}

server {

listen 9095; # Listening on port 9095

location / {

proxy\_pass http://tomcat\_servers; # Forward traffic to the Tomcat container

proxy\_set\_header Host $host;

proxy\_set\_header X-Real-IP $remote\_addr;

proxy\_set\_header X-Forwarded-For $proxy\_add\_x\_forwarded\_for;

proxy\_set\_header X-Forwarded-Proto $scheme;

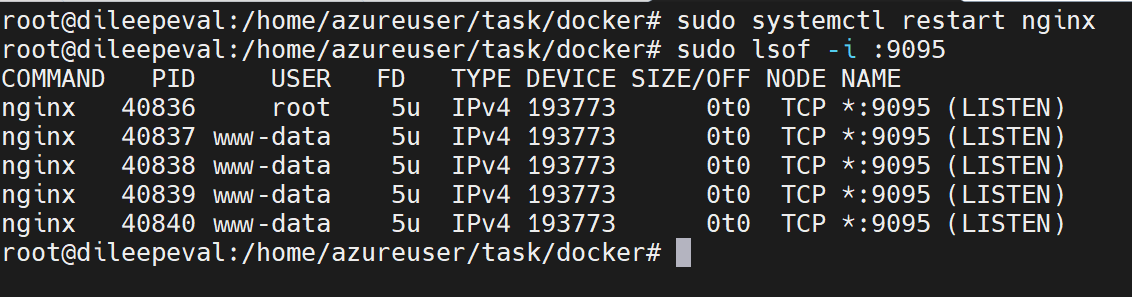
}

}

}

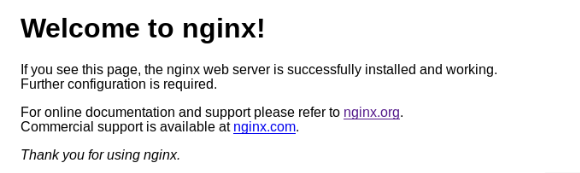
Restart Nginx:

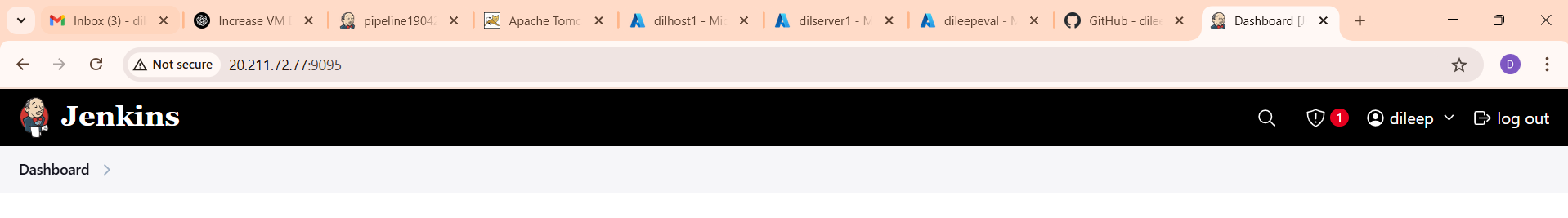
sudo systemctl restart nginx



<http://20.211.72.77:9095>

nginx default page should be displayed but in my case getting Jenkins for the above url





github link:

https://github.com/dileepkumarks-25/ABC1611