

TASK 5

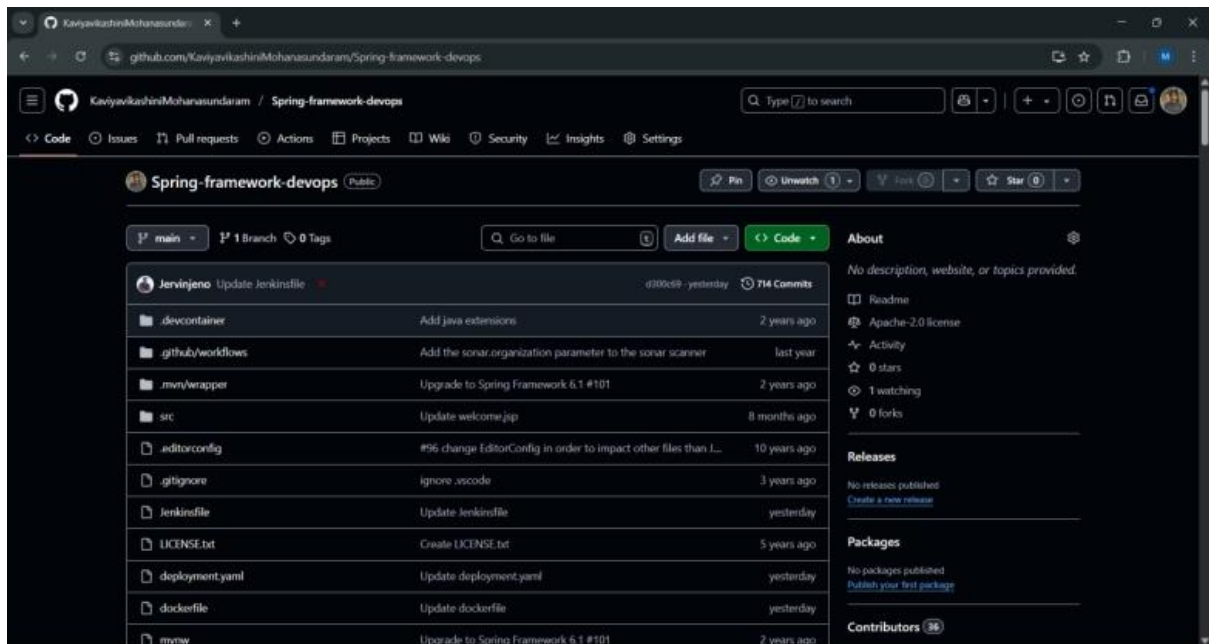
Step 1: Clone the repository in ubuntu using the url : <https://github.com/Jervinjeno/spring-framework.git>

```
root@Kavi:/home/kaviyavikashini# mvn -version
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# mvn -version
Command 'mvn' not found, but can be installed with:
apt install maven
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# apt install maven -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
maven
0 upgraded, 1 newly installed, 0 to remove and 1 not upgraded.
Need to get 0 B/18.3 kB of archives.
After this operation, 127 kB of additional disk space will be used.
Selecting previously unselected package maven.
(Reading database ... 51836 files and directories currently installed.)
Preparing to unpack .../archives/maven_3.8.7-2_all.deb ...
Unpacking maven (3.8.7-2) ...
Setting up maven (3.8.7-2) ...
update-alternatives: using /usr/share/maven/bin/mvn to provide /usr/bin/mvn (mvn) in auto mode
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# chown -R jenkins:jenkins /var/lib/jenkins/.m2
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# systemctl status jenkins
jenkins.service - Jenkins Continuous Integration Server
Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: enabled)
Active: active (running) since Sat 2025-03-22 09:12:40 UTC; 21min ago
Main PID: 1101 (java)
Tasks: 61 (limit: 4575)
Memory: 876.6M ()
CGroup: /system.slice/jenkins.service
└─1101 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

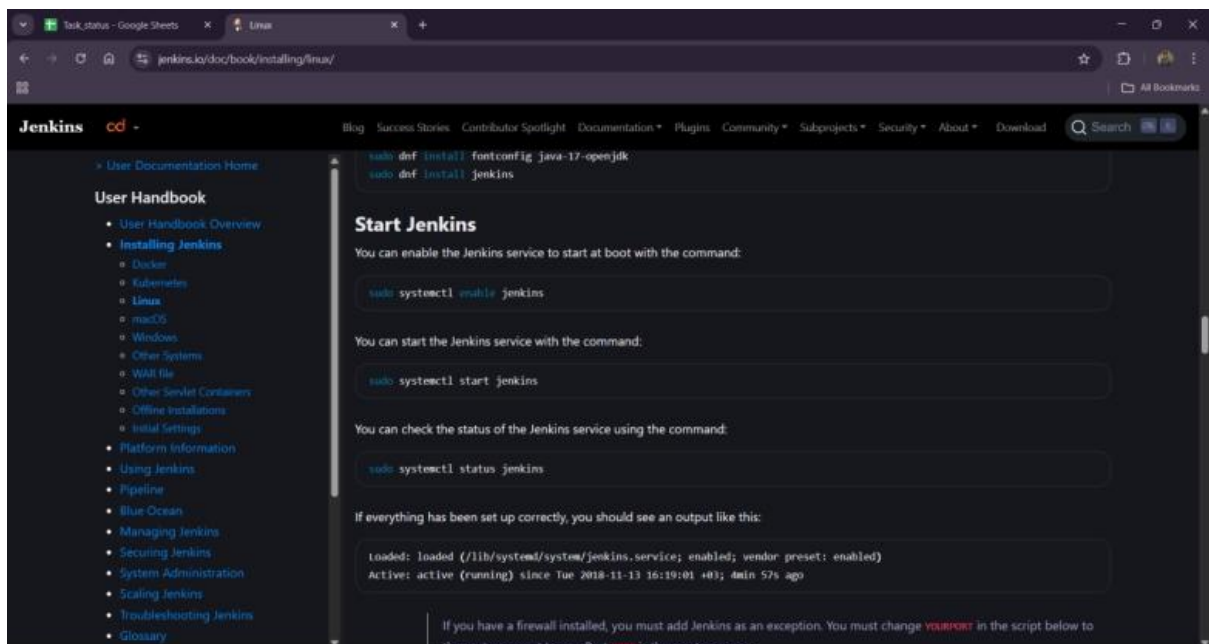
Mar 22 09:12:38 Kavi jenkins[1101]: 2025-03-22 09:12:38.344+0000 [id=43] INFO jenkins.InitReactorRunner$1$onAttained: Started all plugins
Mar 22 09:12:38 Kavi jenkins[1101]: 2025-03-22 09:12:38.347+0000 [id=45] INFO jenkins.InitReactorRunner$1$onAttained: Augmented all extensions
Mar 22 09:12:38 Kavi jenkins[1101]: 2025-03-22 09:12:38.657+0000 [id=41] INFO h.p.b.g.GlobalTimeoutConfiguration$Load: global timeout not set
Mar 22 09:12:39 Kavi jenkins[1101]: 2025-03-22 09:12:39.832+0000 [id=33] INFO jenkins.InitReactorRunner$1$onAttained: System config loaded
Mar 22 09:12:39 Kavi jenkins[1101]: 2025-03-22 09:12:39.836+0000 [id=33] INFO jenkins.InitReactorRunner$1$onAttained: System config adapted
Mar 22 09:12:39 Kavi jenkins[1101]: 2025-03-22 09:12:39.910+0000 [id=48] INFO jenkins.InitReactorRunner$1$onAttained: Loaded all jobs
Mar 22 09:12:39 Kavi jenkins[1101]: 2025-03-22 09:12:39.930+0000 [id=56] INFO jenkins.InitReactorRunner$1$onAttained: Configuration for all jobs
Mar 22 09:12:39 Kavi jenkins[1101]: 2025-03-22 09:12:39.986+0000 [id=35] INFO jenkins.InitReactorRunner$1$onAttained: Completed initialization
Mar 22 09:12:40 Kavi jenkins[1101]: 2025-03-22 09:12:40.036+0000 [id=25] INFO hudson.lifecycle.Lifecycle$onReady: Jenkins is fully up and running
Mar 22 09:12:40 Kavi systemd[1]: Started jenkins.service - Jenkins Continuous Integration Server.
[lines 1-19/19 (END)]
```

Step 2: After deleting the .gitignore file , Push this cloned repository into our newly created repository : **Devops_java_springboot** , using tokens(instead of password) in github.

```
root@Kavi:/home/kaviyavikashini# mvn -version
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# mvn -version
Command 'mvn' not found, but can be installed with:
apt install maven
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# apt install maven -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
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0 upgraded, 1 newly installed, 0 to remove and 1 not upgraded.
Need to get 0 B/18.3 kB of archives.
After this operation, 127 kB of additional disk space will be used.
Selecting previously unselected package maven.
(Reading database ... 51836 files and directories currently installed.)
Preparing to unpack .../archives/maven_3.8.7-2_all.deb ...
Unpacking maven (3.8.7-2) ...
Setting up maven (3.8.7-2) ...
update-alternatives: using /usr/share/maven/bin/mvn to provide /usr/bin/mvn (mvn) in auto mode
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# chown -R jenkins:jenkins /var/lib/jenkins/.m2
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# chmod 777 /usr/local/bin/docker-compose
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# sudo chown -R jenkins:jenkins /var/lib/jenkins/workspace/Spring-framework
chown: cannot access '/var/lib/jenkins/workspace/Spring-framework': No such file or directory
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# sudo nano /etc/environment
root@Kavi:/home/kaviyavikashini/spring-framework/src/main# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
kaviyavikashini/social-app   latest             37622fba3487       About an hour ago   563MB
petclinic-app           latest             c753b4811108       2 hours ago         563MB
your-dockerhub-username/petclinic-app   latest             c753b4811108       2 hours ago         563MB
grafana-prometheus-prometheus   <none>             48af7e249fa4       3 hours ago         271MB
<none>                  e3bceb9ea6ef       3 hours ago         563MB
kaviyavikashini         latest             b3ace7c9f8fd       18 hours ago        519MB
<none>                  3e8ee6ad493b       23 hours ago        563MB
<none>                  8f986a9523bb       23 hours ago        563MB
<none>                  0a8c61132487       23 hours ago        563MB
<none>                  205c65bdb39d       23 hours ago        563MB
<none>                  035b1e681599       23 hours ago        563MB
<none>                  f4946f12c8f5       23 hours ago        563MB
ecommerce              latest             99f8bb621358       2 days ago          195MB
kaviyavikashini/my-app   latest             624ae45a5166       2 days ago          145MB
<none>                  d533aacd8d5e       2 days ago          145MB
t2_app                 latest             4ddeece09e7cb       2 days ago          145MB
kaviyavikashini/my-app   <none>            4ddeece09e7cb       2 days ago          145MB
kaviyavikashini/my-app   <none>            6ee6e658dc8af       2 days ago          145MB
kaviyavikashini/my-app   <none>            1b9744fb9d62       2 days ago          145MB
kaviyavikashini/my-app   latest             bd71ab5d7b10       2 days ago          145MB
<none>                  fd1d5eb13c0e       2 days ago          145MB
<none>                  9406327c3c07       2 days ago          145MB
postgres               alpine             0150e3206277       3 weeks ago         278MB
<none>                  53a18edff809       6 weeks ago         192MB
```



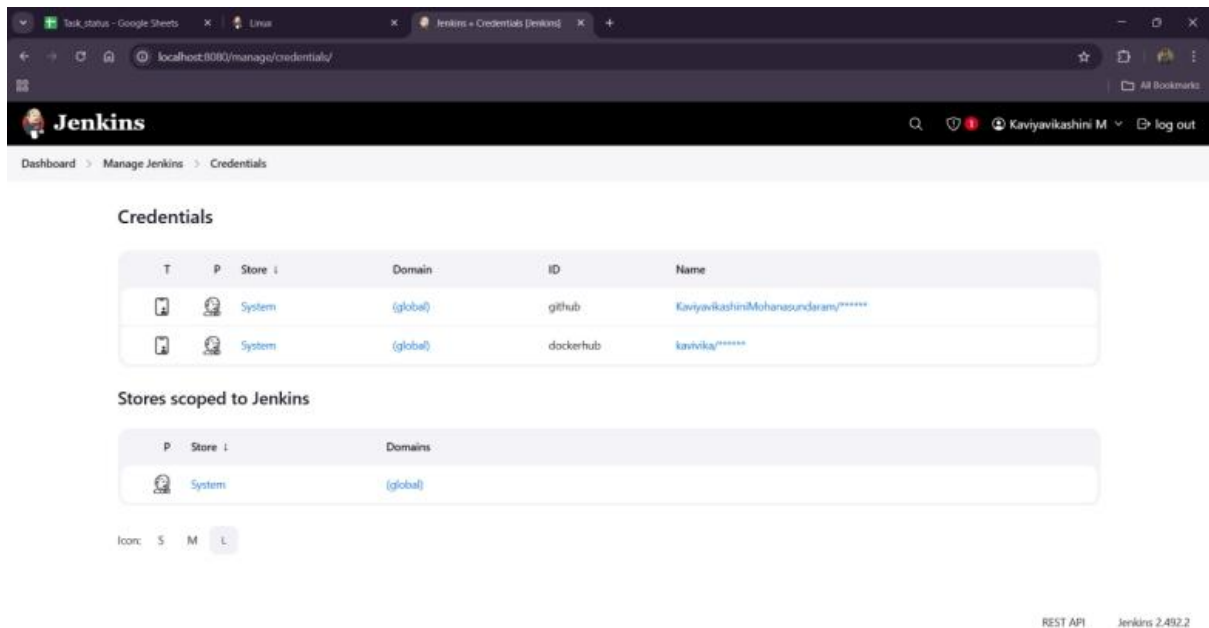
Step 3: In a new ubuntu terminal , start jenkins using the following 3 commands:



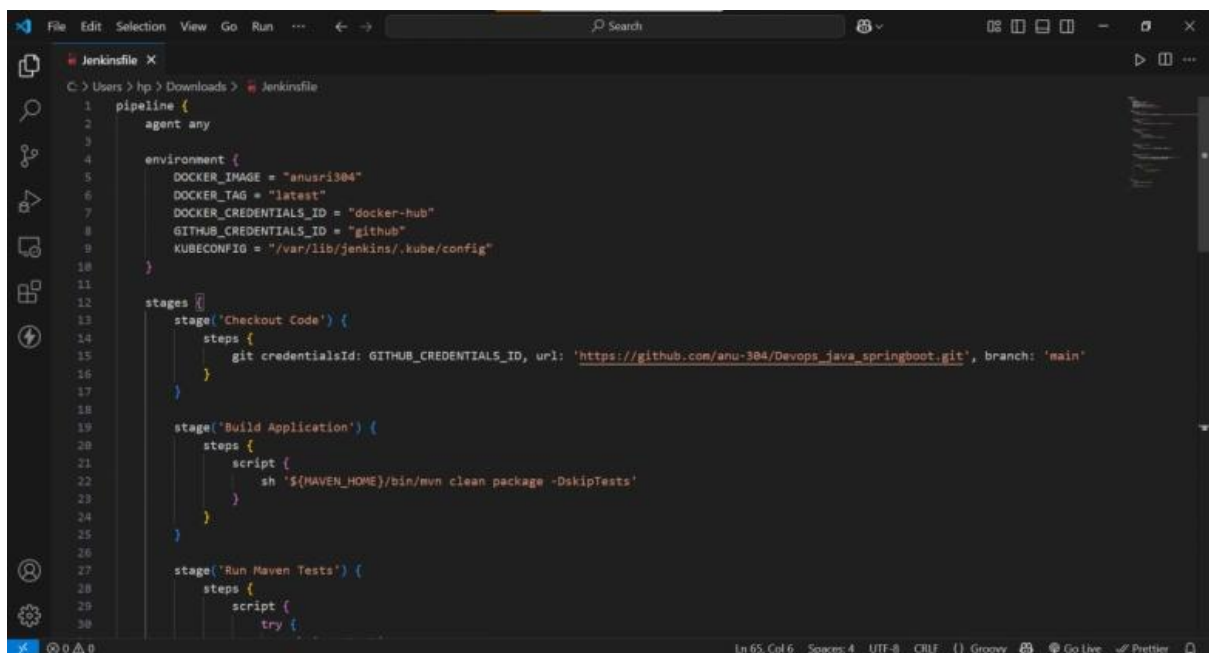
Step 4: In chrome type **localhost:8080** and enter .Then give the username and password to login into jenkins.

Step 5: Go to Manage Jenkins and choose **Credentials** from Security.

Step 6: Add new credentials for github & docker-hub.

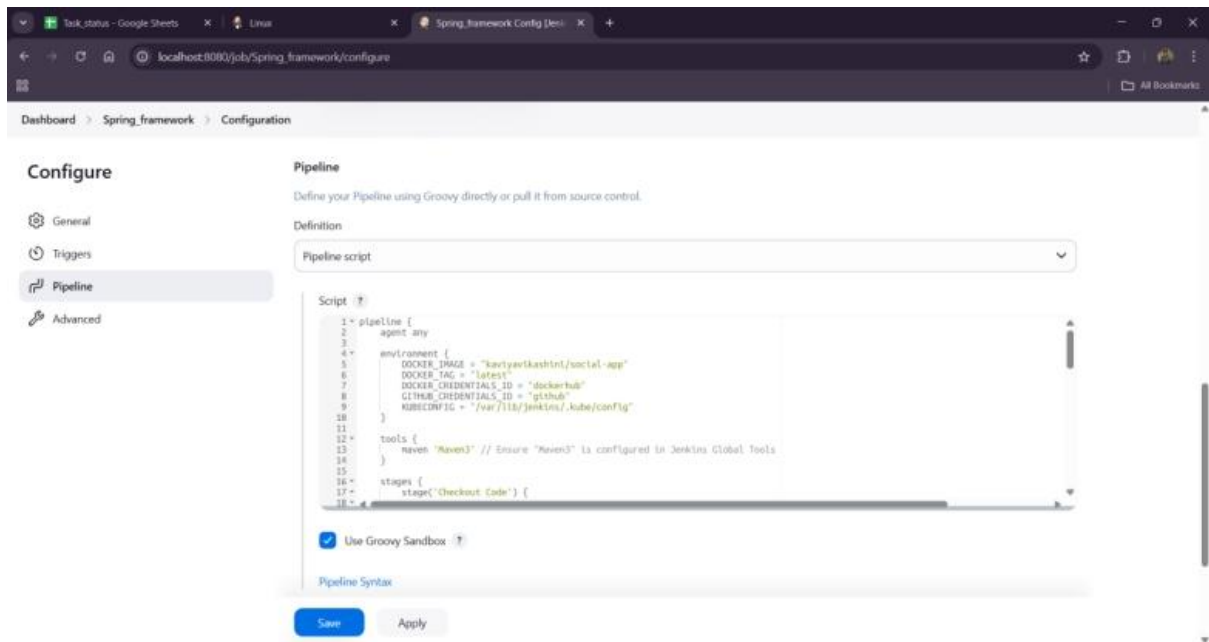


Step 7: Download the given jenkins file, add modify it.



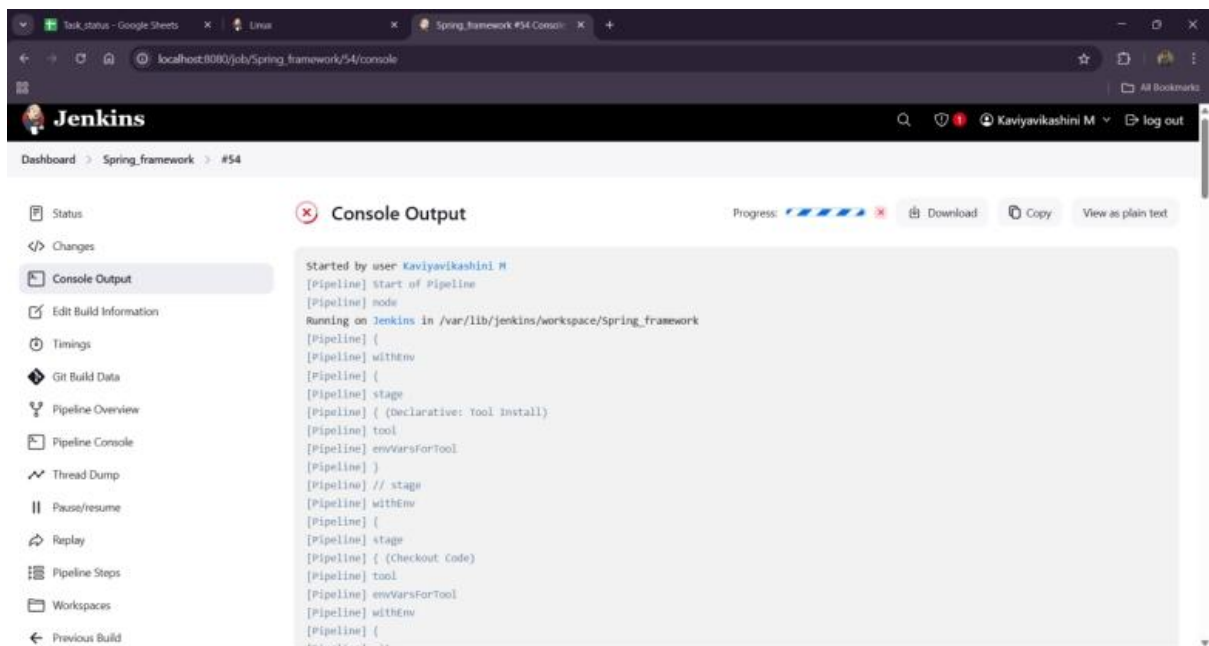
Step 8: Create a new item ci-cd java , pipeline project in jenkins.

Step 9: Go to **Configure** in ci-cd java item, and paste the edited jenkins file in the script with proper indentation.

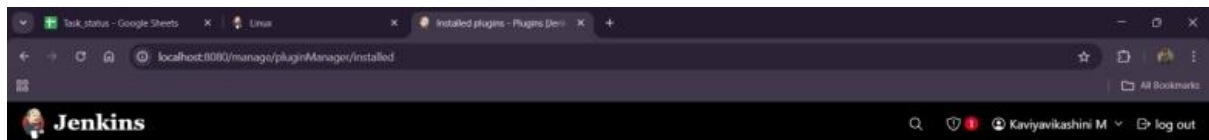


Step 10: Click on Save and Build now.

Step 11: This gives an error message and we need to install maven to overcome this error



Step 12: Install maven and other necessary plugins in Jenkins, give correct Docker Hub password and build again.



Dashboard > Manage Jenkins > Plugins

Plugins

Search: pipeline docker

Updates: 1 available

Available plugins

Installed plugins

Advanced settings

Name	Enabled
Docker Pipeline 611.v16e84da.6d3ff	<input checked="" type="checkbox"/>

Build and use Docker containers from pipelines.
[Report an issue with this plugin](#)

REST API Jenkins 2.492.2

```
root@Kavi:/home/kaviyavika#
447 /var/lib/jenkins/.m2/repository/org/apache/maven/plugins/maven-clean-plugin/3.2.0/maven-clean-plugin-3.2.0.pom
448 rm -rf /var/lib/jenkins/.m2/repository/org/apache/maven/plugins/maven-clean-plugin
449 mvn clean package -DskipTests
450 chown -R jenkins:jenkins /var/lib/jenkins/.m2
451 chmod -R 755 /var/lib/jenkins/.m2
452 apt update
453 apt install maven -y
454 mvn -version
455 rm -rf /var/lib/jenkins/.m2/repository/org/apache/maven/plugins/maven-clean-plugin
456 mvn clean package -DskipTests
457 systemctl restart jenkins
458 git clone https://github.com/Jervinjeno/grafana-prometheus.git
459 git clone https://github.com/YOUR_USERNAME/grafana-prometheus.git
460 cd grafana-prometheus
461 cd home
462 git clone https://github.com/Jervinjeno/grafana-prometheus.git
463 cd grafana-prometheus
464 docker-compose up
465
466 docker-compose
467 chmod 777 /usr/local/bin/docker-compose
468 docker-compose
469 docker-compose version
470 docker-compose up -d
471 apt-get install docker-compose
472 docker-compose up -d
473 sudo curl -L "https://github.com/docker/compose/releases/latest/download/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
474 docker-compose up
475 docker ps -a
476 systemctl restart jenkins
477 systemctl start jenkins
478 systemctl status jenkins
479 git clone https://github.com/Jervinjeno/spring-framework.git
480 cd spring-framework
481 ls
482 cd src
483 cd .
484 cd main
485 git init
486 git add .
487 history
```

Dashboard > ci-cd java springboot >

ci-cd java springboot

Status

Changes

Build Now

Configure

Delete Pipeline

Stages

Rename

Pipeline Syntax

Permalinks

- Last build (#18), 29 min ago
- Last stable build (#18), 29 min ago
- Last successful build (#18), 29 min ago
- Last failed build (#17), 35 min ago
- Last unsuccessful build (#17), 35 min ago
- Last completed build (#18), 29 min ago

Buils

Filter

localhost:8080/job/ci-cd java springboot/

Dashboard > ci-cd java springboot > #18

```
latest: digest: sha256:0c34700c13039000/8c4d43e/080c84604e0b18/4070/013074793cc08070c01 size: 4913
[Pipeline] }
[Pipeline] // withDockerRegistry
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Declarative: Post Actions)
[Pipeline] echo
Deployment Successful!
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```