

# TASK 2

**Step 1:** Open Jenkins and click "**New Item.**"

**Step 2:** Enter a project name, select "**Pipeline,**" then click **OK.**

**Step 3:** In the **General** tab, scroll down to the "**Pipeline**" section.

**Step 4:** Under "**Definition,**" select "**Pipeline script from SCM.**"

**Step 5:** In the **SCM** field, choose "**Git,**" then enter your GitHub repository URL.

**Step 6:** Ensure your GitHub repository contains the following files:

- app.py (Application code)
- Dockerfile (Instructions to build the Docker image)
- docker-compose.yml (For container orchestration)
- Jenkinsfile (Defines the pipeline stages)
- requirements.txt (Dependencies for the application)

**Step 7:** Click "**Save**" to apply the configuration.

**Step 8:** On the project page, click "**Build Now**" to start the job.

**Step 9:** The build status will appear in the **Build History** panel (left-side panel).

**Step 10:** Click on the latest build (#1, #2, etc.) and select "**Console Output**" to view logs and results.

Activities Firefox Mar 19 22:40

cdcd\_pipeline #14 Conso x localhost/ x Inbox (2,622) - harshinig. x +

localhost:8080/job/cdcd\_pipeline/14/console

60%

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### Console Output

```
Started by user Harshini G
Obtained Jenkinsfile from git https://github.com/Harshini-Gunasekar/Jenkins-repo
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/cdcd_pipeline
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
using credential Github
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/cdcd_pipeline/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Harshini-Gunasekar/Jenkins-repo # timeout=10
Fetching upstream changes from https://github.com/Harshini-Gunasekar/Jenkins-repo
> git --version # timeout=10
> git --version # 'git version 2.34.1'
using GIT ASKPASS to set credentials
> git fetch --tags --force --progress -- https://github.com/Harshini-Gunasekar/Jenkins-repo +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/main:(commit) # timeout=10
Checking out Revision 51307a261f9f0fcb66e75af04acb9b82a0f2def (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 51307a261f9f0fcb66e75af04acb9b82a0f2def # timeout=10
Commit message: "Update Jenkinsfile"
> git rev-list --no-walk 51307a261f9f0fcb66e75af04acb9b82a0f2def # timeout=10
[Pipeline] }
[Pipeline] // stage
[Pipeline] // withEnv
[Pipeline] {
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Checkout Code)
[Pipeline] git
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/cdcd_pipeline/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Harshini-Gunasekar/Jenkins-repo.git # timeout=10
```

Activities Firefox Mar 19 22:42

cdcd\_pipeline #14 Conso x localhost/ x Inbox (2,621) - harshinig. x +

localhost:8080/job/cdcd\_pipeline/14/console

60%

```
> git config remote.origin.url https://github.com/Harshini-Gunasekar/Jenkins-repo.git # timeout=10
Fetching upstream changes from https://github.com/Harshini-Gunasekar/Jenkins-repo.git
> git --version # timeout=10
> git --version # 'git version 2.34.1'
> git fetch --tags --force --progress -- https://github.com/Harshini-Gunasekar/Jenkins-repo.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/main:(commit) # timeout=10
Checking out Revision 51307a261f9f0fcb66e75af04acb9b82a0f2def (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 51307a261f9f0fcb66e75af04acb9b82a0f2def # timeout=10
> git branch -a -v --no-abbrev # timeout=10
> git branch -D main # timeout=10
> git checkout -b main 51307a261f9f0fcb66e75af04acb9b82a0f2def # timeout=10
Commit message: "Update Jenkinsfile"
[Pipeline] }
[Pipeline] // stage
[Pipeline] { (Build Docker Image)
[Pipeline] script
[Pipeline] {
[Pipeline] sh
+ docker build -t harshini794/my-app:latest .
#0 building with "default" instance using docker driver

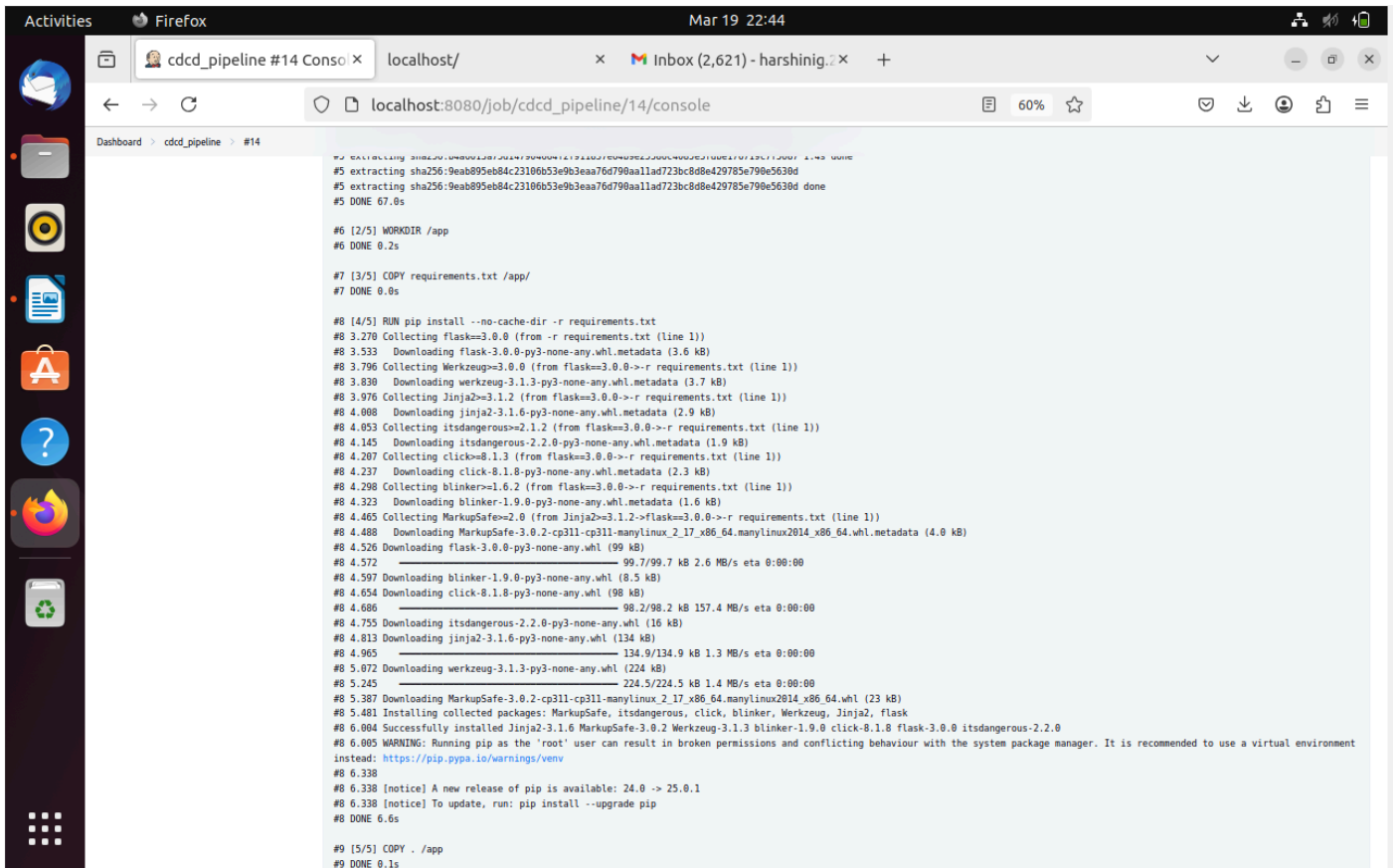
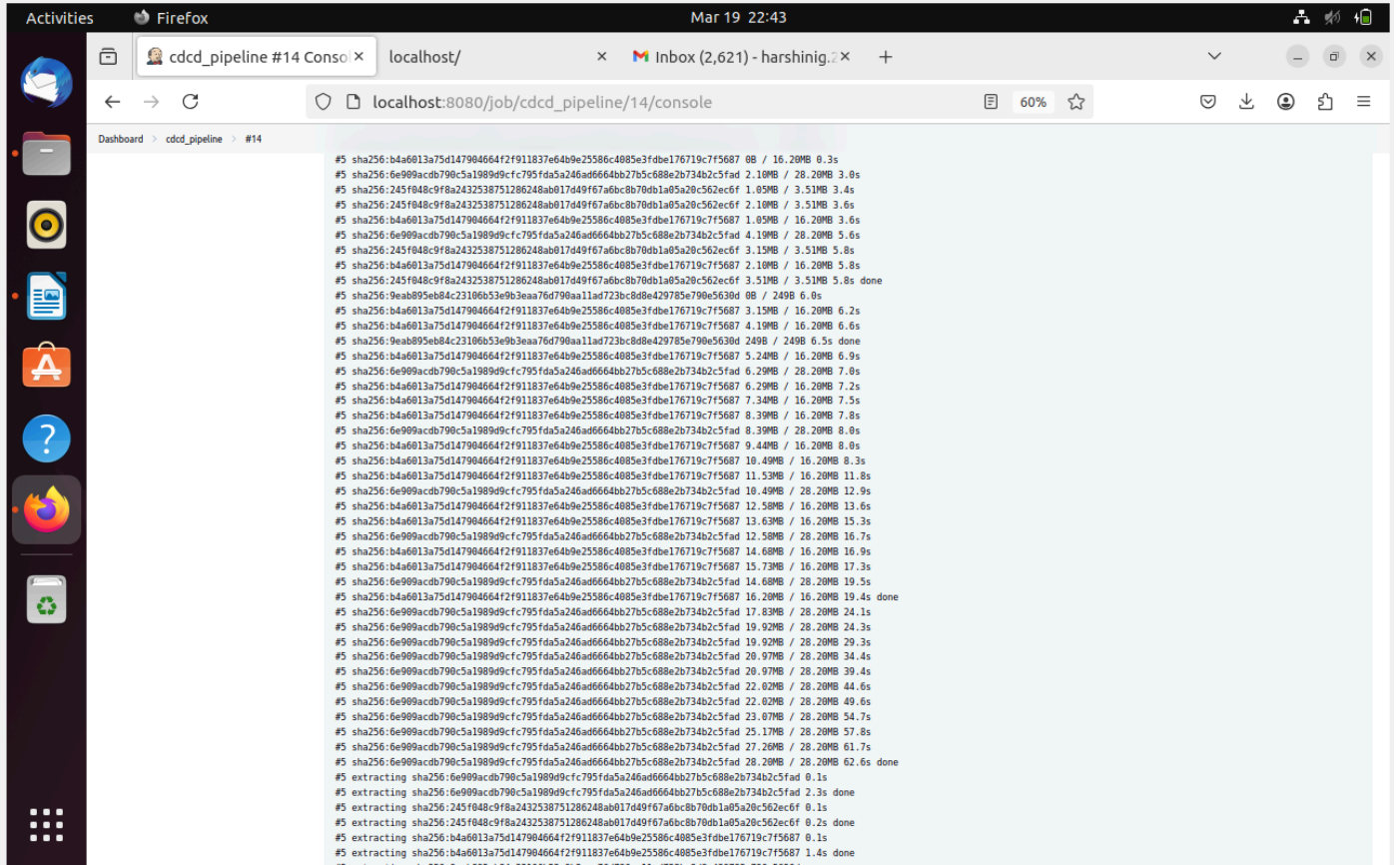
#1 [internal] load build definition from Dockerfile
#1 transferring dockerfile: 308 B 0.0s
#1 DONE 0.1s

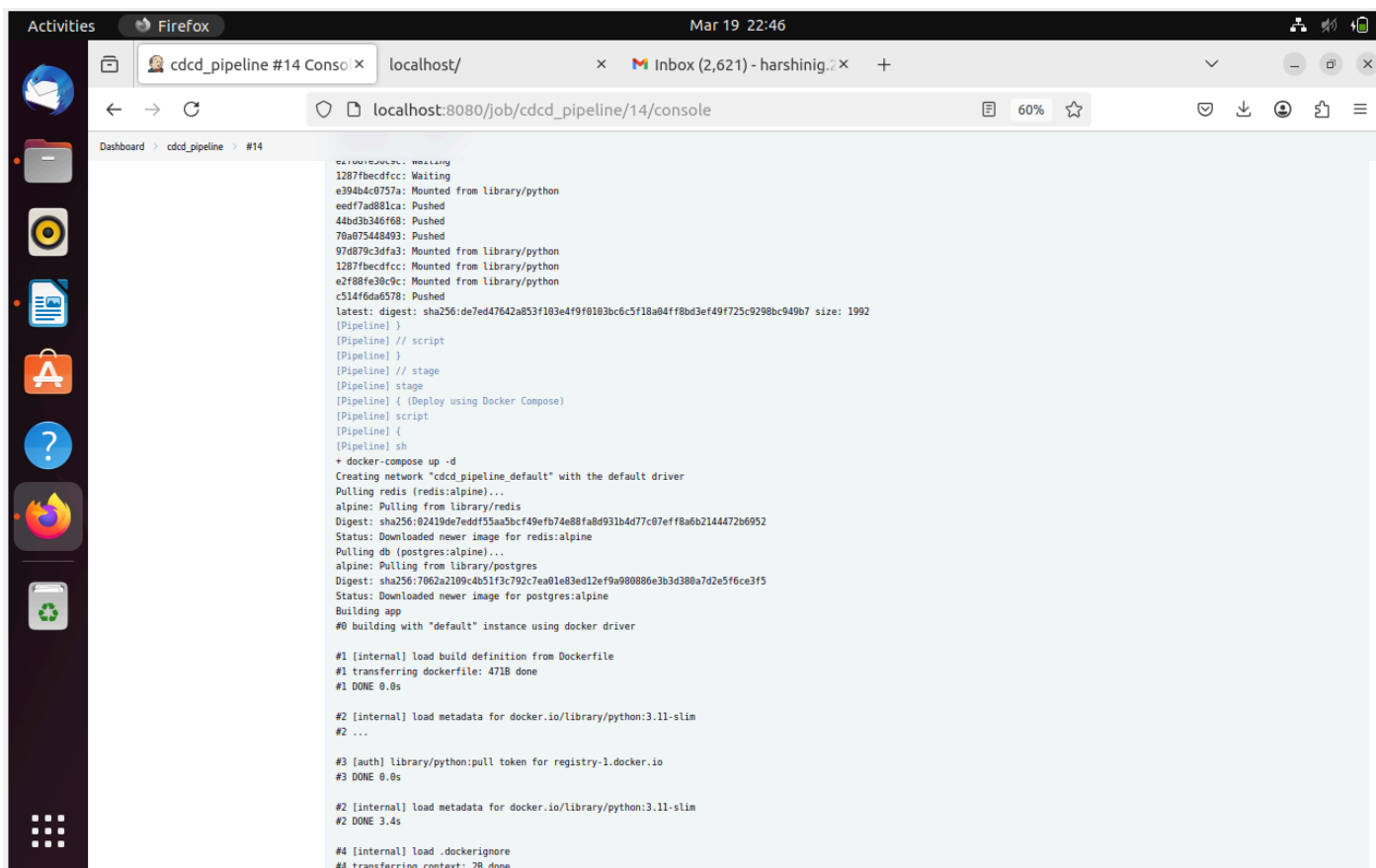
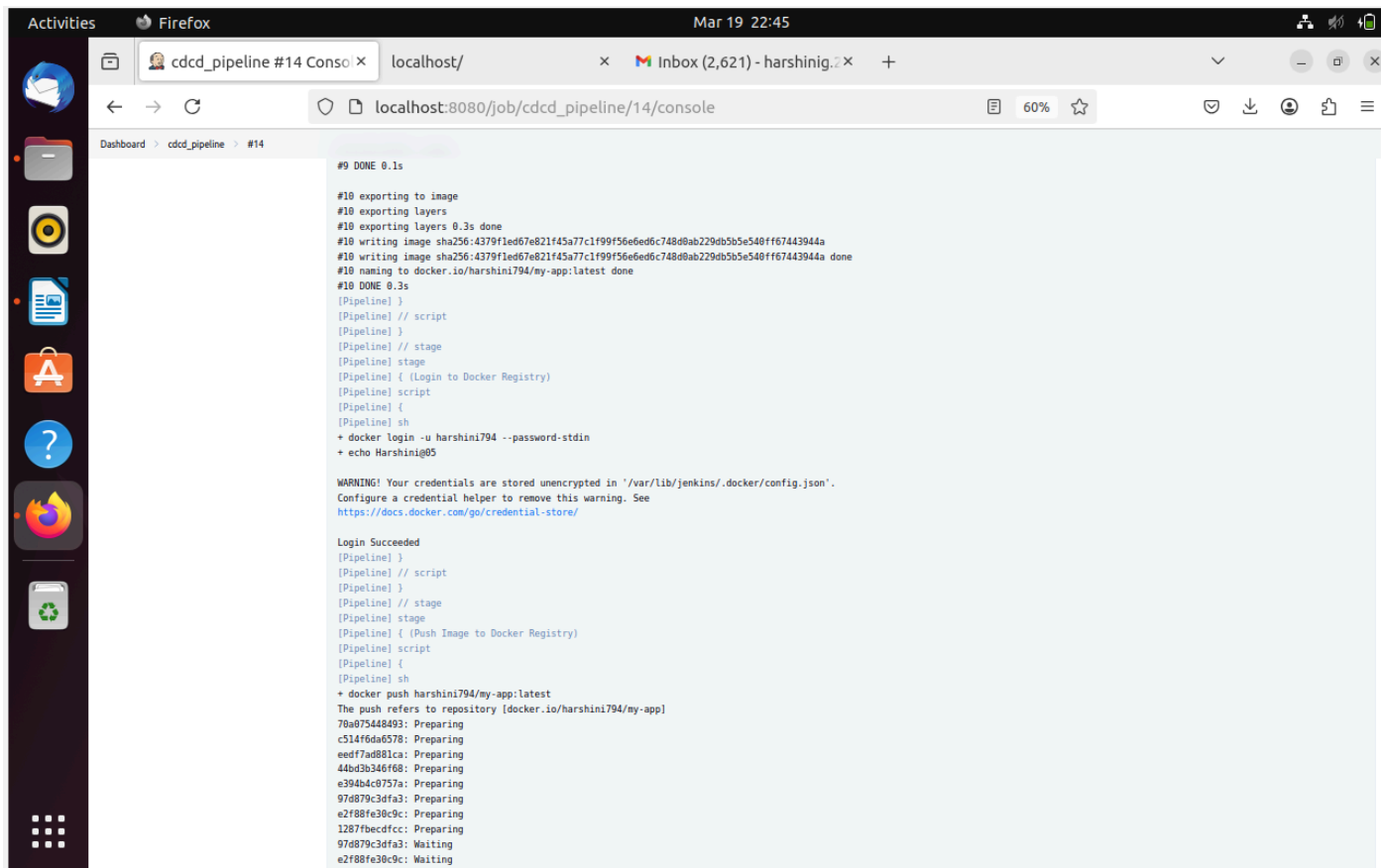
#2 [internal] load metadata for docker.io/library/python:3.11-slim
#2 DONE 6.7s

#3 [internal] load .dockerignore
#3 transferring context: 28 B done
#3 DONE 0.0s

#4 [internal] load build context
#4 transferring context: 53.51kB 0.1s done
#4 DONE 0.2s

#5 [1/5] FROM docker.io/library/python:3.11-slim@sha256:7029b00486ac40bed03e36775b064d3f3d39dcdf19cd45e6a52d541e6c178f0
#5 resolve docker.io/library/python:3.11-slim@sha256:7029b00486ac40bed03e36775b064d3f3d39dcdf19cd45e6a52d541e6c178f0 0.0s done
#5 sha256:7029b00486ac40bed03e36775b064d3f3d39dcdf19cd45e6a52d541e6c178f0 9.13kB / 9.13kB done
#5 sha256:9a8a27f6b3b0a2b7384fcd8f072ab0a53b6d0c7e02a0b6ed41a6b7455e5f 1.75kB / 1.75kB done
#5 sha256:de36c124850b5902946d2c95c6f17de084337aeafac3c0a9b6854fa66800 5.20kB / 5.20kB done
#5 sha256:6e090acdb790c5a198949cf795fda5a246ad666bb27b5c688e2b734b2c5fad 0B / 20.20MB 0.3s
#5 sha256:245f048c9f8a2432538751286248ab0174d9f67a6bc8b70db1a05a20c562ec6f 0B / 3.51MB 0.3s
#5 sha256:b4a6013a75d147904664f2f911837e4b09e25586c4085e3f4dbe176719c7f5687 0B / 16.20MB 0.3s
```





Activities Firefox Mar 19 22:46

cdcd\_pipeline #14 Console localhost/

localhost:8080/job/cdcd\_pipeline/14/console

Dashboard > cdcd\_pipeline > #14

```
#4 transferring context: 2B done
#4 DONE 0.0s

#5 [1/5] FROM docker.io/library/python:3.11-slim@sha256:7029b00486ac40bed03e36775b064d3f3d39dcdf19cd45e6a52d541e6c178f0
#5 DONE 0.0s

#6 [internal] load build context
#6 transferring context: 4.81kB 0.0s done
#6 DONE 0.0s

#7 [2/5] WORKDIR /app
#7 CACHED

#8 [3/5] COPY requirements.txt /app/
#8 CACHED

#9 [4/5] RUN pip install --no-cache-dir -r requirements.txt
#9 CACHED

#10 [5/5] COPY . /app
#10 CACHED

#11 exporting to image
#11 exporting layers done
#11 writing image sha256:4379f1ed67e821f45a77c1f99f56e6ed6c748d8ab229db5b5e548ff67443944a done
#11 naming to docker.io/library/cdcd_pipeline_app done
#11 DONE 0.0s

Image for service app was built because it did not already exist. To rebuild this image you must use `docker-compose build` or `docker-compose up --build`.
Creating cdcd_pipeline_db_1 ...
Creating cdcd_pipeline_redis_1 ...
Creating cdcd_pipeline_redis_1 ... done
Creating cdcd_pipeline_db_1 ... done
Creating cdcd_pipeline_app_1 ...
Creating cdcd_pipeline_app_1 ... done

[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Declarative: Post Actions)
[Pipeline] echo
Pipeline executed successfully!
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
```

Activities Firefox Mar 19 22:47

cdcd\_pipeline #14 Console localhost/

localhost:8080/job/cdcd\_pipeline/14/console

Dashboard > cdcd\_pipeline > #14

```
#7 [2/5] WORKDIR /app
#7 CACHED

#8 [3/5] COPY requirements.txt /app/
#8 CACHED

#9 [4/5] RUN pip install --no-cache-dir -r requirements.txt
#9 CACHED

#10 [5/5] COPY . /app
#10 CACHED

#11 exporting to image
#11 exporting layers done
#11 writing image sha256:4379f1ed67e821f45a77c1f99f56e6ed6c748d8ab229db5b5e548ff67443944a done
#11 naming to docker.io/library/cdcd_pipeline_app done
#11 DONE 0.0s

Image for service app was built because it did not already exist. To rebuild this image you must use `docker-compose build` or `docker-compose up --build`.
Creating cdcd_pipeline_db_1 ...
Creating cdcd_pipeline_redis_1 ...
Creating cdcd_pipeline_redis_1 ... done
Creating cdcd_pipeline_db_1 ... done
Creating cdcd_pipeline_app_1 ...
Creating cdcd_pipeline_app_1 ... done

[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Declarative: Post Actions)
[Pipeline] echo
Pipeline executed successfully!
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

REST API Jenkins 2.501