

A Jenkins Pipeline is used to automate the process of building, testing, and deploying software.

### Step 1: Open Jenkins and Create a New Pipeline

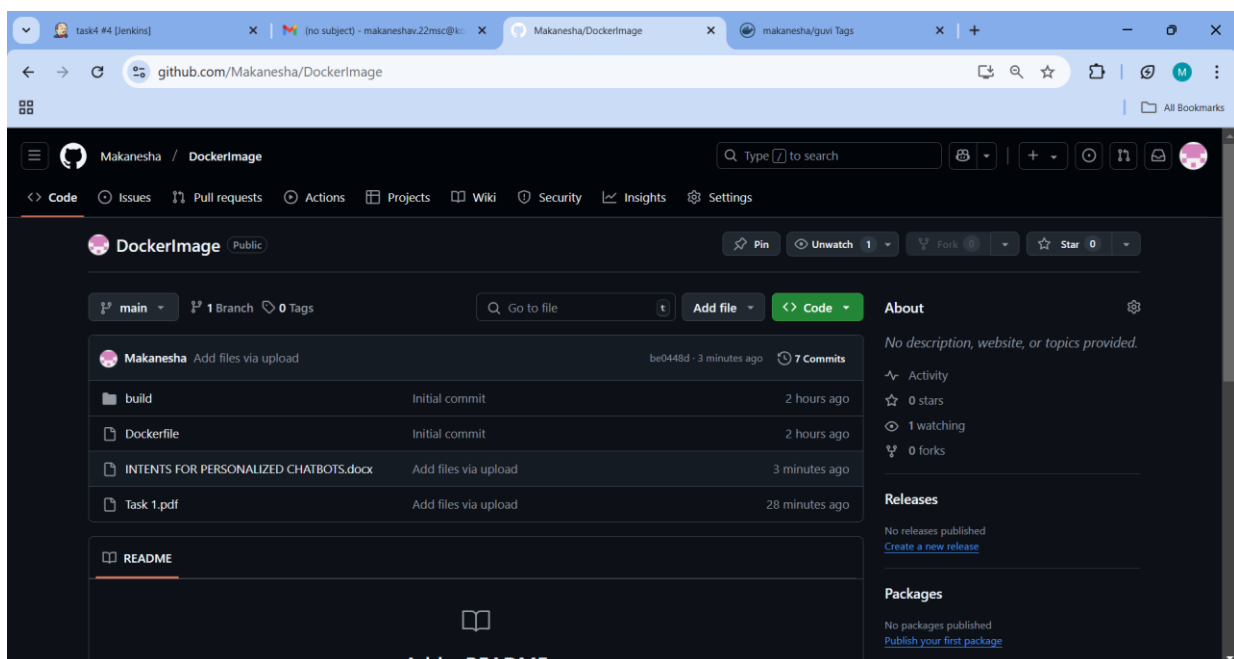
1. Log in to Jenkins.
2. Click on "New Item"
3. Enter a name for the pipeline
4. Select "Pipeline" as the item type.
5. Click "OK" to proceed.

### Step 2: Configure the Pipeline

### Step 3: Define the Pipeline Script

Using Jenkinsfile from SCM

1. Select "Pipeline script from SCM".
2. Choose "Git" and enter the repository URL.
3. Set the script path to Jenkinsfile.



task6 Config [Jenkins]

localhost:8080/job/task6/configure

Dashboard > task6 > Configuration

### Configure

- General
- Pipeline**
- Advanced

#### Pipeline

Define your Pipeline using Groovy directly or pull it from source control.

Definition

Pipeline script from SCM

SCM

Git

Repositories

Repository URL

https://github.com/Makanesha/DockerImage.git

Credentials

- none -

+ Add

Advanced

Add Repository

Save Apply

task6 > Configuration

### Configure

- General
- Pipeline**
- Advanced

#### Configure

Branches to build

Branch Specifier (blank for 'any')

\*/main

Add Branch

Repository browser

(Auto)

Additional Behaviours

Add

Script Path

Jenkinsfile

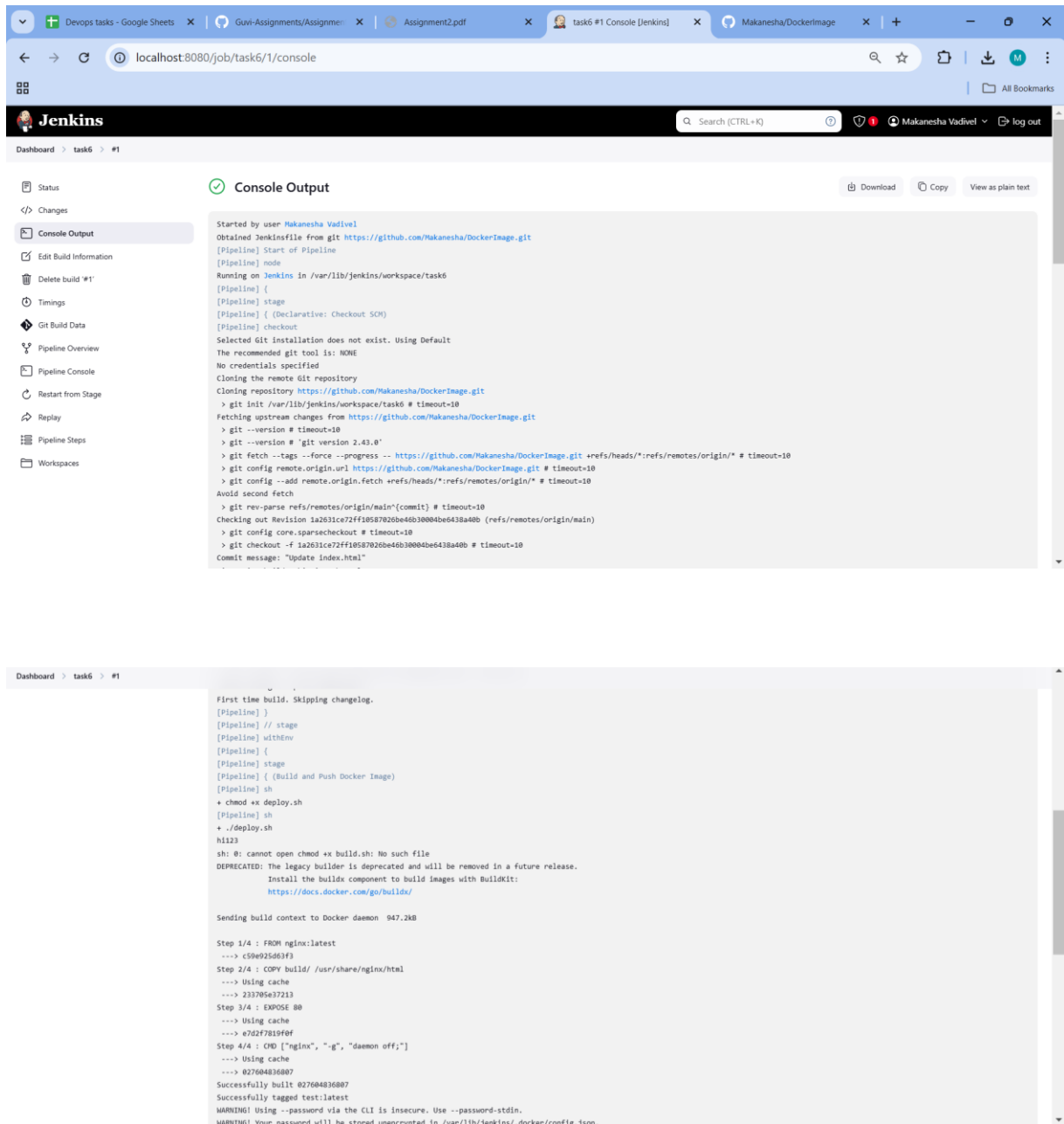
☒ Lightweight checkout

[Pipeline Syntax](#)

#### Advanced

Save Apply

## Console Output



The screenshot displays the Jenkins web interface for a build named 'task6 #1'. The 'Console Output' tab is selected, showing the following log:

```
Started by user Makanesha Vadiwel
Obtained Jenkinsfile from git https://github.com/Makanesha/DockerImage.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/task6
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SOH)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
Cloning the remote git repository
Cloning repository https://github.com/Makanesha/DockerImage.git
> git init /var/lib/jenkins/workspace/task6 # timeout=10
Fetching upstream changes from https://github.com/Makanesha/DockerImage.git
> git --version # timeout=10
> git --version # 'git version 2.43.0'
> git fetch --tags --force --progress -- https://github.com/Makanesha/DockerImage.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/Makanesha/DockerImage.git # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 1a2631ce72ff18587020be40b300040be6438a40b (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 1a2631ce72ff18587020be40b300040be6438a40b # timeout=10
Commit message: "Update index.html"

First time build. Skipping changelog.
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build and Push Docker Image)
[Pipeline] sh
+ chmod +x deploy.sh
[Pipeline] sh
+ ./deploy.sh
hi22
sh: 0: cannot open chmod +x build.sh: No such file
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with Buildkit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 947.2kB

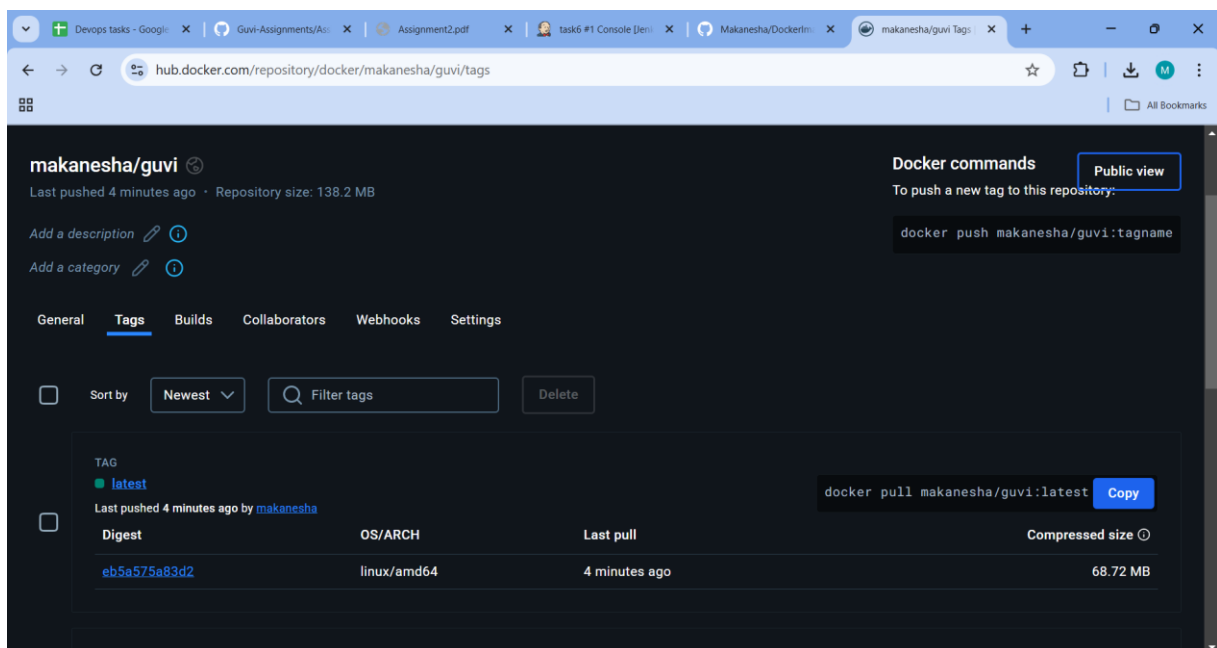
Step 1/4 : FROM nginx:latest
--> c50e925d63f3
Step 2/4 : COPY build/ /usr/share/nginx/html
--> Using cache
--> 233705e37213
Step 3/4 : EXPOSE 80
--> Using cache
--> e7d2f7819f0f
Step 4/4 : CMD ["nginx", "-g", "daemon off;"]
--> Using cache
--> 027604836007
Successfully built 027604836007
Successfully tagged test:latest
WARNING! Using --password via the CLI is insecure. Use --password-stdin.
WARNING! Your password will be stored unencrypted in /var/lib/jenkins/.docker/config.json.
```

```
Dashboard > task6 > #1

Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
Using default tag: latest
The push refers to repository [docker.io/makanesha/guvi]
6f6c97b04b5: Preparing
e2eb04df0bda: Preparing
1b78ffef68d1: Preparing
16649054094a: Preparing
a280e15d559d: Preparing
0b2dafd01482: Preparing
2cdcabc723c: Preparing
7914cf600f5: Preparing
0b2dafd01482: Waiting
7914cf600f5: Waiting
2cdcabc723c: Waiting
a280e15d559d: Layer already exists
6f6c97b04b5: Layer already exists
16649054094a: Layer already exists
e2eb04df0bda: Layer already exists
1b78ffef68d1: Layer already exists
2cdcabc723c: Layer already exists
7914cf600f5: Layer already exists
0b2dafd01482: Layer already exists
latest: digest: sha256:eb5a575a83d29164450a549d623d7db057dbbba5cef80e959ae5d1254405e643 size: 1987
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Image pushed into docker hub



Pulling the image

```
root@LAPTOP-6I133M48:/home/makanesha# docker pull makanesha/guvi:latest
latest: Pulling from makanesha/guvi
Digest: sha256:609b4fb254aaefd1a2520740c4c838191c3696138bbbfc1f47dbc713ddeb3602
Status: Image is up to date for makanesha/guvi:latest
docker.io/makanesha/guvi:latest
```

```
root@LAPTOP-6I133M48:/home/makanesha# docker run -itd -p 600:80 makanesha/guvi:latest
20667ffae1031ac2435cd30c353084e4ac7940472e2f2431fe1425eb53bbd0ae
root@LAPTOP-6I133M48:/home/makanesha# |
```

<http://localhost:600>

