

TASK 2

Name: Thesega P S

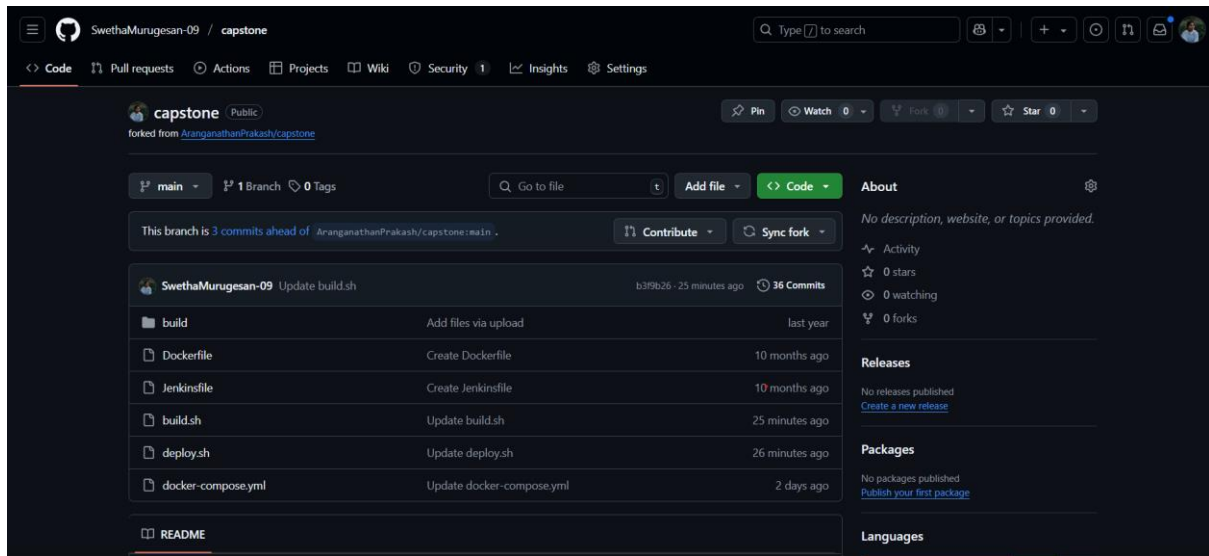
Rollno: 22CSR224

Step 1: Install docker by using the command such as

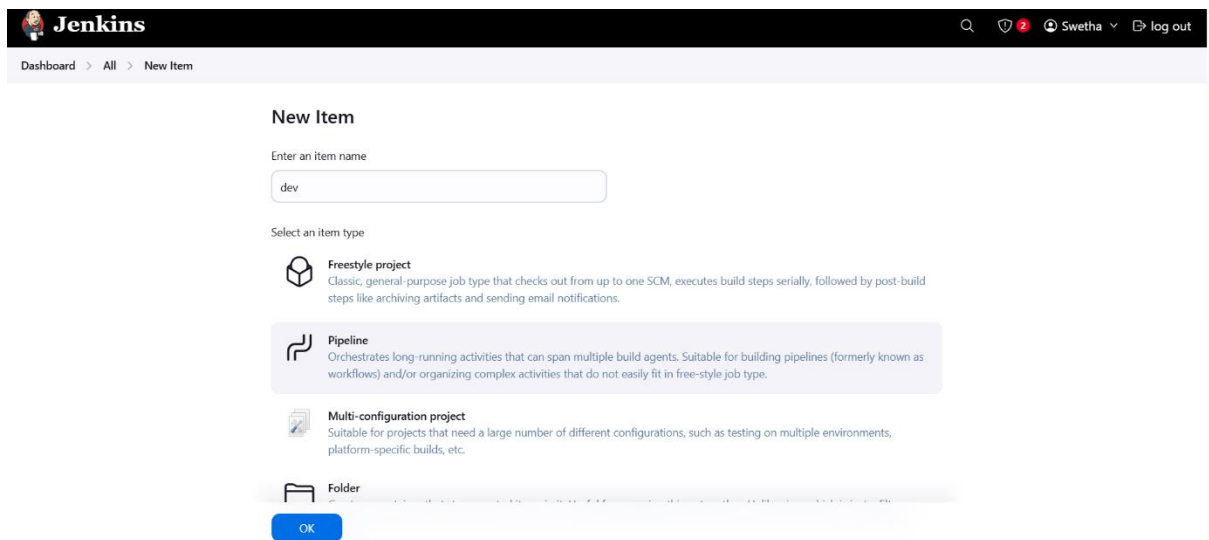
sudo apt-get update

```
root@swetha:~/dock# sudo apt-get update
Ign:1 https://pkg.jenkins.io/debian binary/ InRelease
Hit:2 https://pkg.jenkins.io/debian binary/ Release
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:5 http://archive.ubuntu.com/ubuntu noble InRelease
Get:6 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [671 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [130 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8968 B]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [6936 B]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [820 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [177 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.0 kB]
Get:15 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [16.9 kB]
Get:16 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [208 B]
Get:17 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
Ign:18 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages
Ign:19 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en
Ign:20 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components
Get:21 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [13.5 kB]
Get:22 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1040 kB]
Get:23 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [364 kB]
Get:24 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [25.8 kB]
Get:25 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:26 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:18 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [922 kB]
Get:27 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:28 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [20.0 kB]
Get:29 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:30 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:19 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en [209 kB]
Get:20 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Fetched 5009 kB in 8s (652 kB/s)
Reading package lists... Done
root@swetha:~/dock# sudo apt-get update
Hit:1 http://security.ubuntu.com/ubuntu noble-security InRelease
Ign:2 https://pkg.jenkins.io/debian binary/ InRelease
Hit:3 https://pkg.jenkins.io/debian binary/ Release
Hit:5 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:6 http://archive.ubuntu.com/ubuntu noble-updates InRelease
```

Step 2: Push the code into github



Step 3: Create a new item in Jenkins by giving an item name and select an item type as pipeline



Step 4: Give the repository url and branch name and script path from github

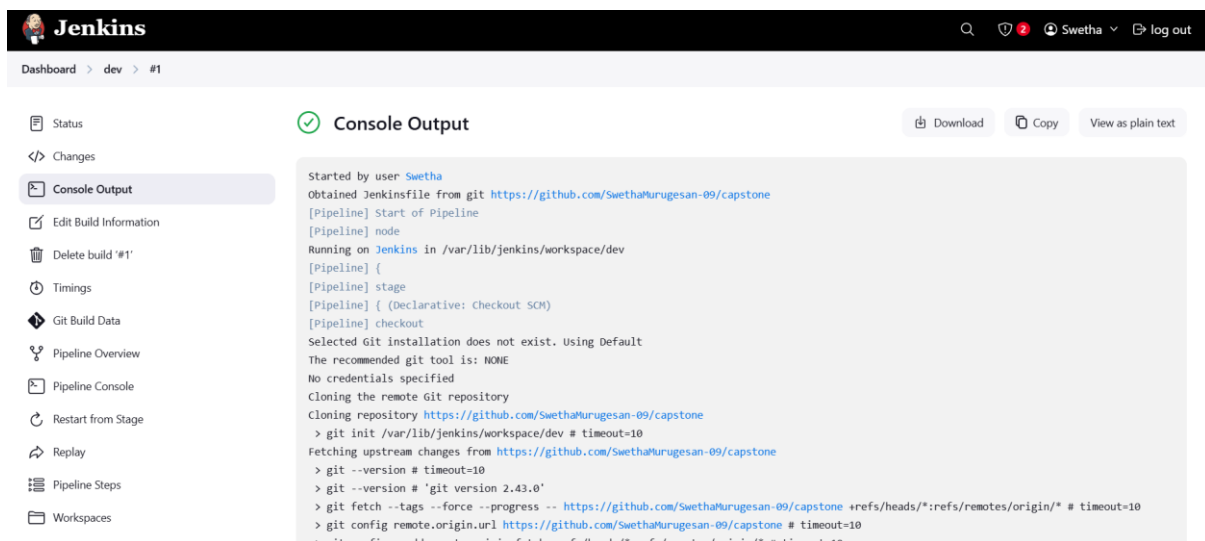
The first screenshot shows the 'Configure' page for the 'dev' pipeline. The 'General' tab is selected. The 'Git' provider is chosen. The 'Repository URL' is set to 'https://github.com/SwethaMurugesan-09/capstone'. The 'Credentials' dropdown is set to 'none'. The 'Branches to build' section is expanded, showing the 'Branch Specifier (blank for 'any')' set to '*/main'. The 'Save' button is highlighted.

The second screenshot shows the 'Advanced' tab of the 'Configure' page. The 'Branch Specifier (blank for 'any')' is set to '*/main'. The 'Repository browser' is set to '(Auto)'. The 'Script Path' is set to 'Jenkinsfile'. The 'Lightweight checkout' checkbox is checked. The 'Save' button is highlighted.

Step 5: Give build now in dashboard , it will build the project

The screenshot shows the Jenkins dashboard for the 'dev' pipeline. The 'Status' tab is selected. The 'Build Now' button is visible. The 'Builds' section shows a single build, #1, completed at 8:20 AM. The 'REST API' and 'Jenkins 2.492.2' are displayed at the bottom right.

Step 6: Check the console output to verify whether it is built correctly



The screenshot shows the Jenkins web interface. The left sidebar contains a list of links: Status, Changes, Console Output (selected), Edit Build Information, Delete build '#1', Timings, Git Build Data, Pipeline Overview, Pipeline Console, Restart from Stage, Replay, Pipeline Steps, and Workspaces. The main area displays the 'Console Output' for build #1, which is a successful build. The output text is as follows:

```
Started by user Swetha
Obtained Jenkinsfile from git https://github.com/SwethaMurugesan-09/capstone
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/dev
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[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/SwethaMurugesan-09/capstone
> git init /var/lib/jenkins/workspace/dev # timeout=10
Fetching upstream changes from https://github.com/SwethaMurugesan-09/capstone
> git --version # timeout=10
> git --version # 'git version 2.43.0'
> git fetch --tags --force --progress -- https://github.com/SwethaMurugesan-09/capstone +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/SwethaMurugesan-09/capstone # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
```

Step 7: Run the command to see the output in localhost

```
root@Swetha:~# sudo apt-get install docker-buildx-plugin
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker-buildx-plugin is already the newest version (0.22.0-1~ubuntu.24.04~noble).
0 upgraded, 0 newly installed, 0 to remove and 131 not upgraded.
root@Swetha:~#
```

```
root@Swetha:~# docker images
REPOSITORY          TAG                IMAGE ID           CREATED            SIZE
swethamurugesan/devopsgit  latest            8549df71284f      30 minutes ago    195MB
test1                latest            8549df71284f      30 minutes ago    195MB
test                 latest            69a3483fcf3b      4 hours ago       192MB
swethamurugesan/index.dev  latest            69a3483fcf3b      4 hours ago       192MB
swethamurugesan/nginx     latest            53a18edff809      6 weeks ago       192MB
nginx                latest            53a18edff809      6 weeks ago       192MB
swethamurugesan/devops.dev latest            53a18edff809      6 weeks ago       192MB
root@Swetha:~# docker run -itd -p 70:80 test1
064b78012d78d92bb348debb3983f19c03518c00b710d7934ca1d7bb32878204
root@Swetha:~#
```

Output:

