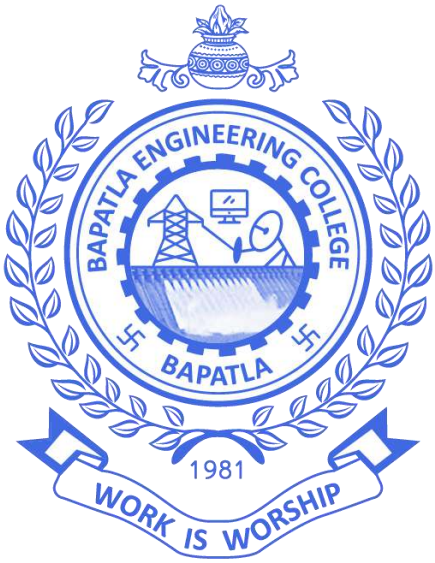
Bapatla Engineering College :: Bapatla

(Autonomous)

Department of Computer Science and Engineering



Lab Manual

IV / IV B. Tech.

DevOps Lab

(20CSL701/SOC5)

List of Experiments

Experiment 1

1. Demonstrate working with Git Shell commands.

Git Shell Commands:

git config

This command sets the author name and email address respectively to be used with your commits.

syntax:-

git config –global user.name “[name]”

git config –global user.email “[email address]”

git init

This command is used to start a new repository.

syntax:-

git init

git clone

This command is used to obtain a repository from an existing URL.

syntax:-

git clone [url]

git add

This command adds a file to the staging area.

syntax:-

git add [file]

This command adds one or more to the staging area.

syntax:-

git add .

git commit

This command records or snapshots the file permanently in the version history.

syntax:-

git commit -m “[your message]”

git diff

This command shows the file differences which are not yet staged.

syntax:-

git diff

This command shows the differences between the two branches mentioned.

syntax:-

git diff [first branch] [second branch]

git reset

This command unstages the file, but it preserves the file contents.

syntax:-

git reset [file]

git status

This command lists all the files that have to be committed.

syntax:-

git status

git log

This command is used to list the version history for the current branch.

syntax:-

git log

git show

This command shows the metadata and content changes of the specified commit.

syntax:-

git show [commit]

git branch

This command lists all the local branches in the current repository.

syntax:-

git branch

This command creates a new branch.

syntax:-

git branch [branch name]

This command deletes the feature branch.

syntax:-

git branch -d [branch name]

git checkout

This command is used to switch from one branch to another.

syntax:-

git checkout [branch name]

This command creates a new branch and also switches to it.

syntax:-

git checkout -b [branch name]

git merge

This command merges the specified branch's history into the current branch.

syntax:-

git merge [branch name]

git remote

This command is used to connect your local repository to the remote server.

syntax:-

git remote [variable name] [remote server link]

git push

This command sends the committed changes of master branch to your remote repository.

syntax:-

git push [variable name] master

This command sends the branch commits to your remote repository.

syntax:-

git push [variable name] [branch name]

git pull

This command fetches and merges changes on the remote server to your working directory.

syntax:-

git pull [repository link]

git stash

This command temporarily stores all the modified tracked files.

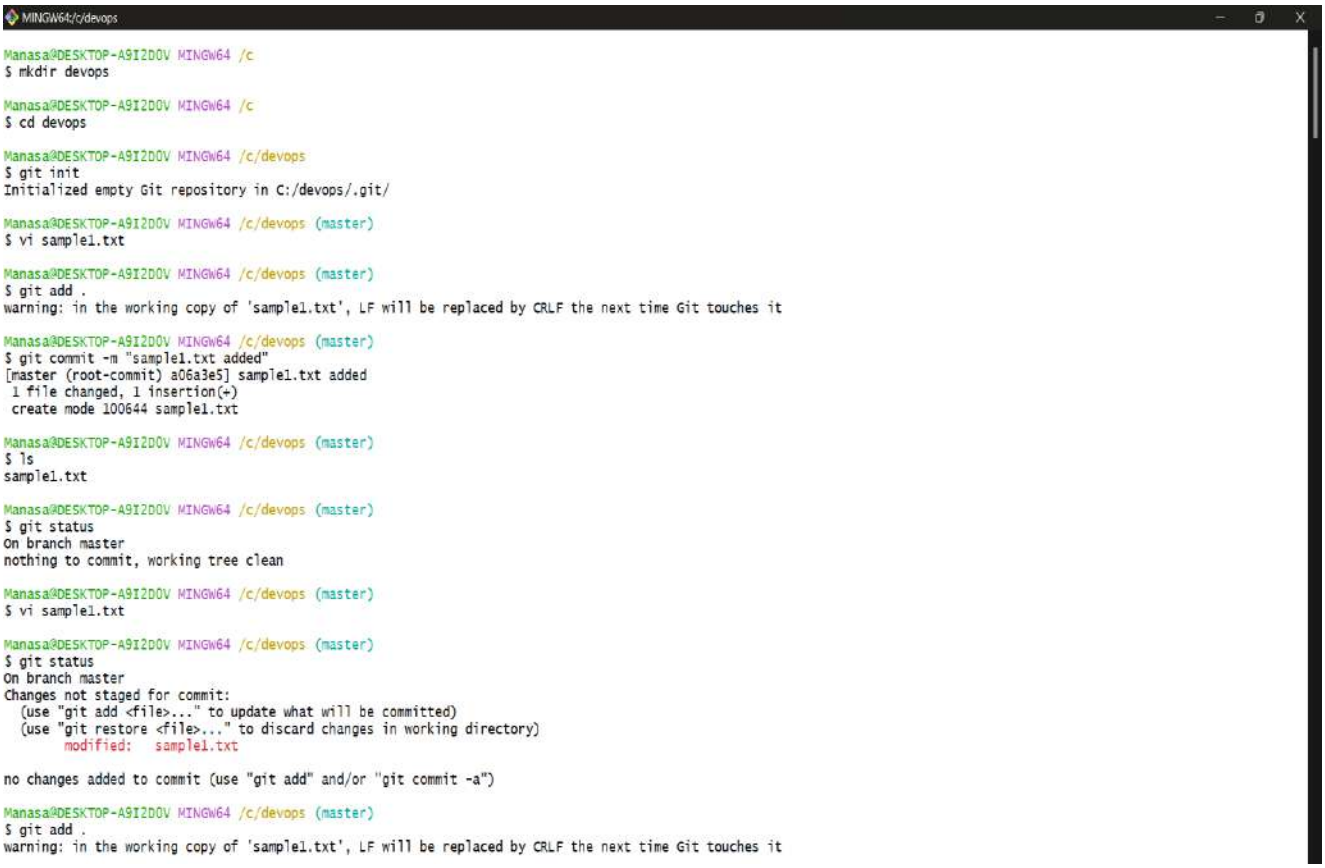
syntax:-

git stash

git stash pop

syntax:-

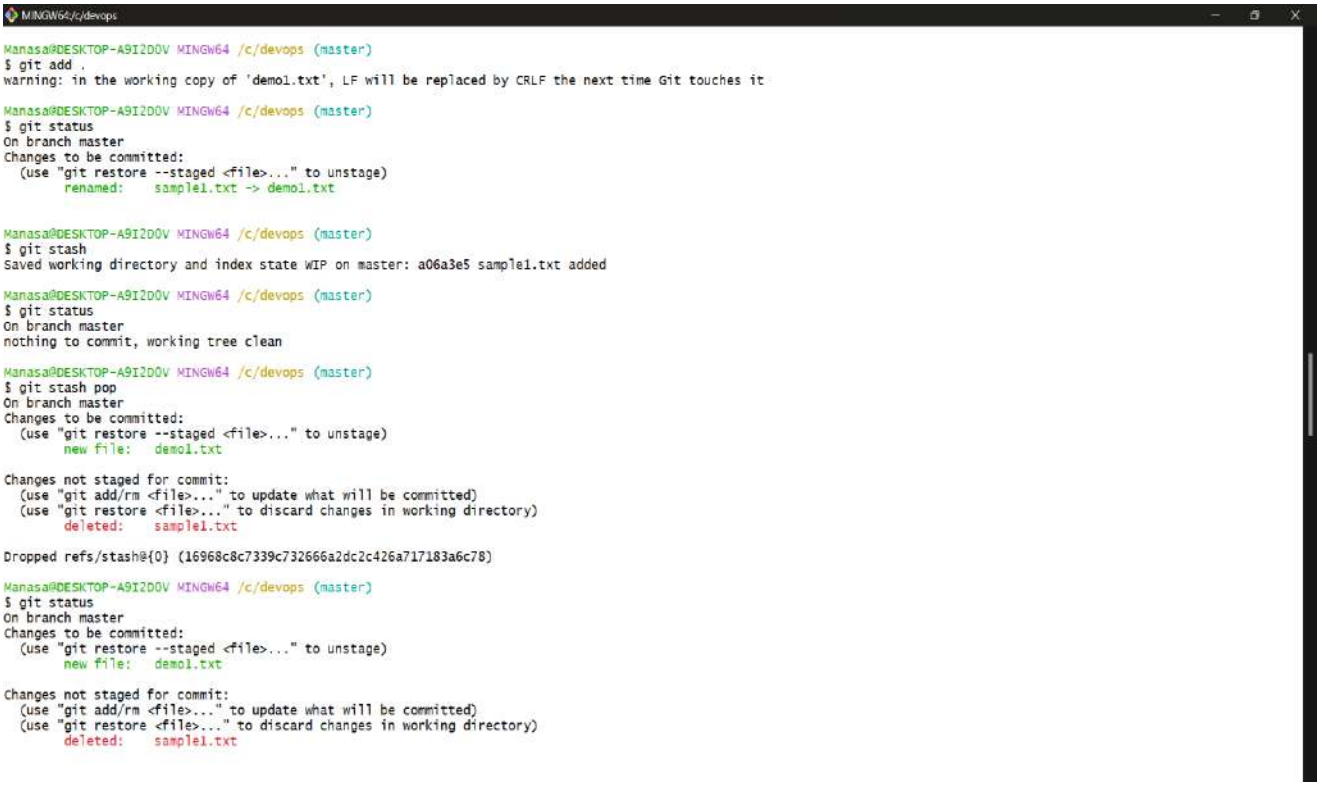
This command restores the most recently stashed files.

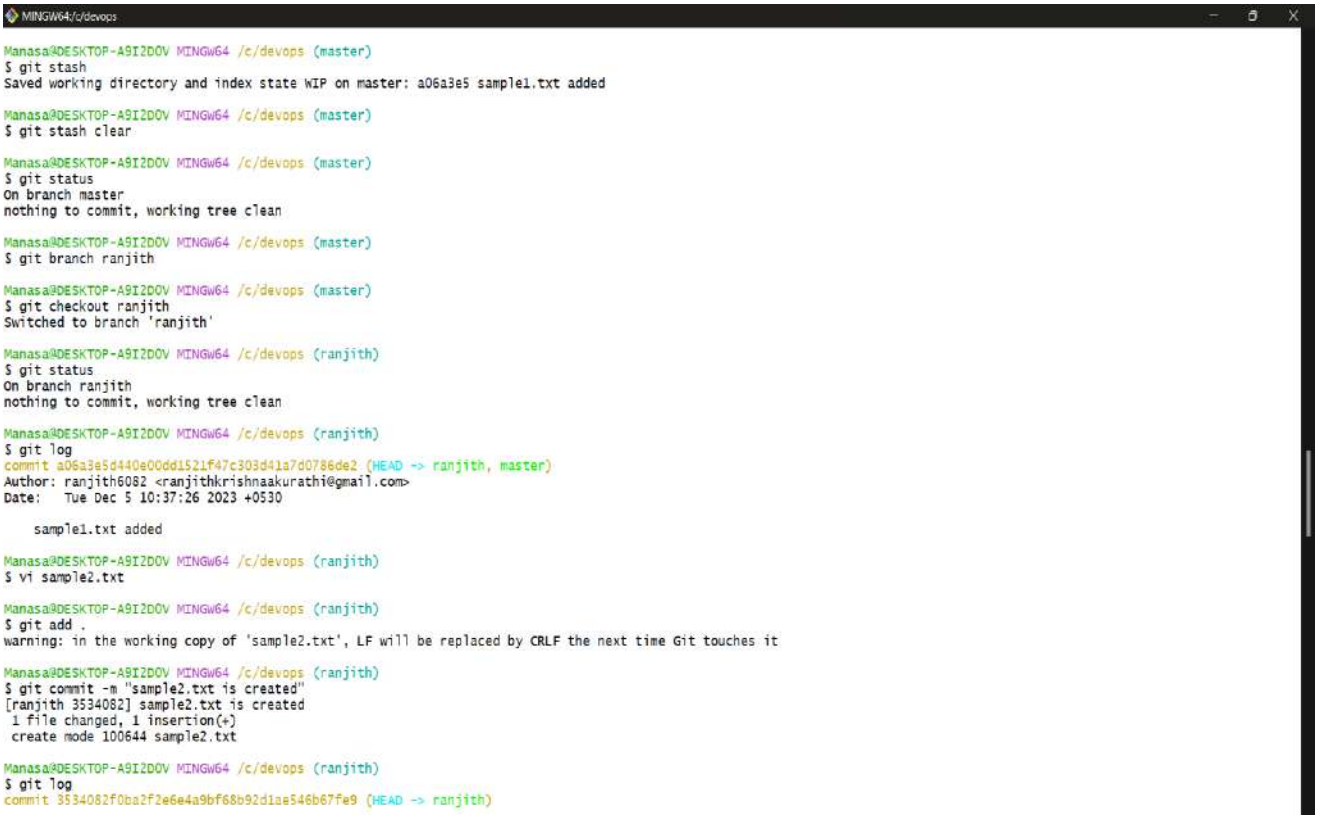


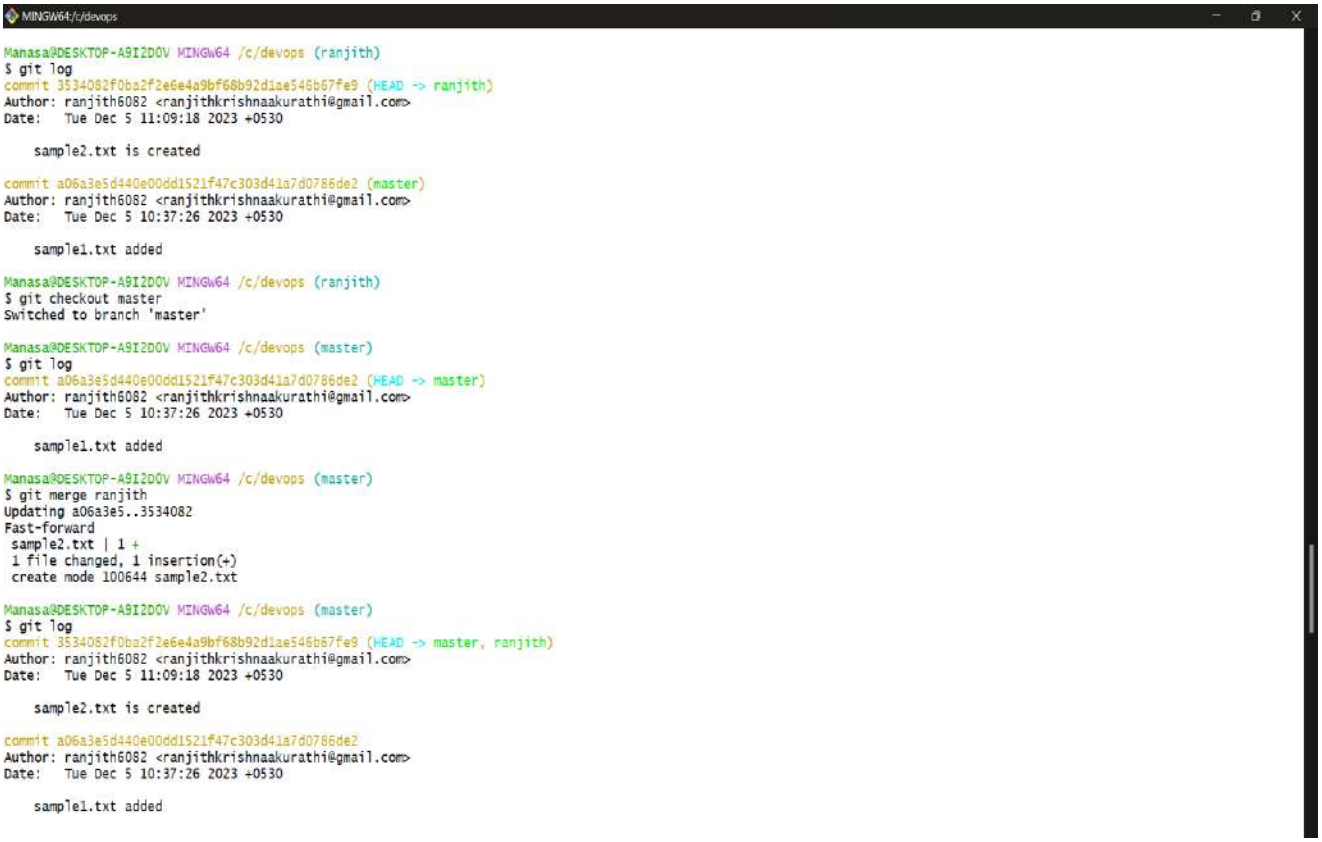

MINGW64:/c/devops
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git add .
warning: in the working copy of 'sample1.txt', LF will be replaced by CRLF the next time Git touches it
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
Changes to be committed:
(use "git restore --staged <file>..." to unstage)
modified: sample1.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git commit -m "sample1 file is commit"
[master 1b70577] sample1 file is commit
1 file changed, 1 insertion(+)
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
nothing to commit, working tree clean
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ mv sample1.txt demo1.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ ls
demo1.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
Changes not staged for commit:
(use "git add/rm <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
deleted: sample1.txt
Untracked files:
(use "git add <file>..." to include in what will be committed)
demo1.txt
no changes added to commit (use "git add" and/or "git commit -a")
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git log
commit 1b705774757f60f9dd4a84d8de62f1c85b9af358 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:39:16 2023 +0530

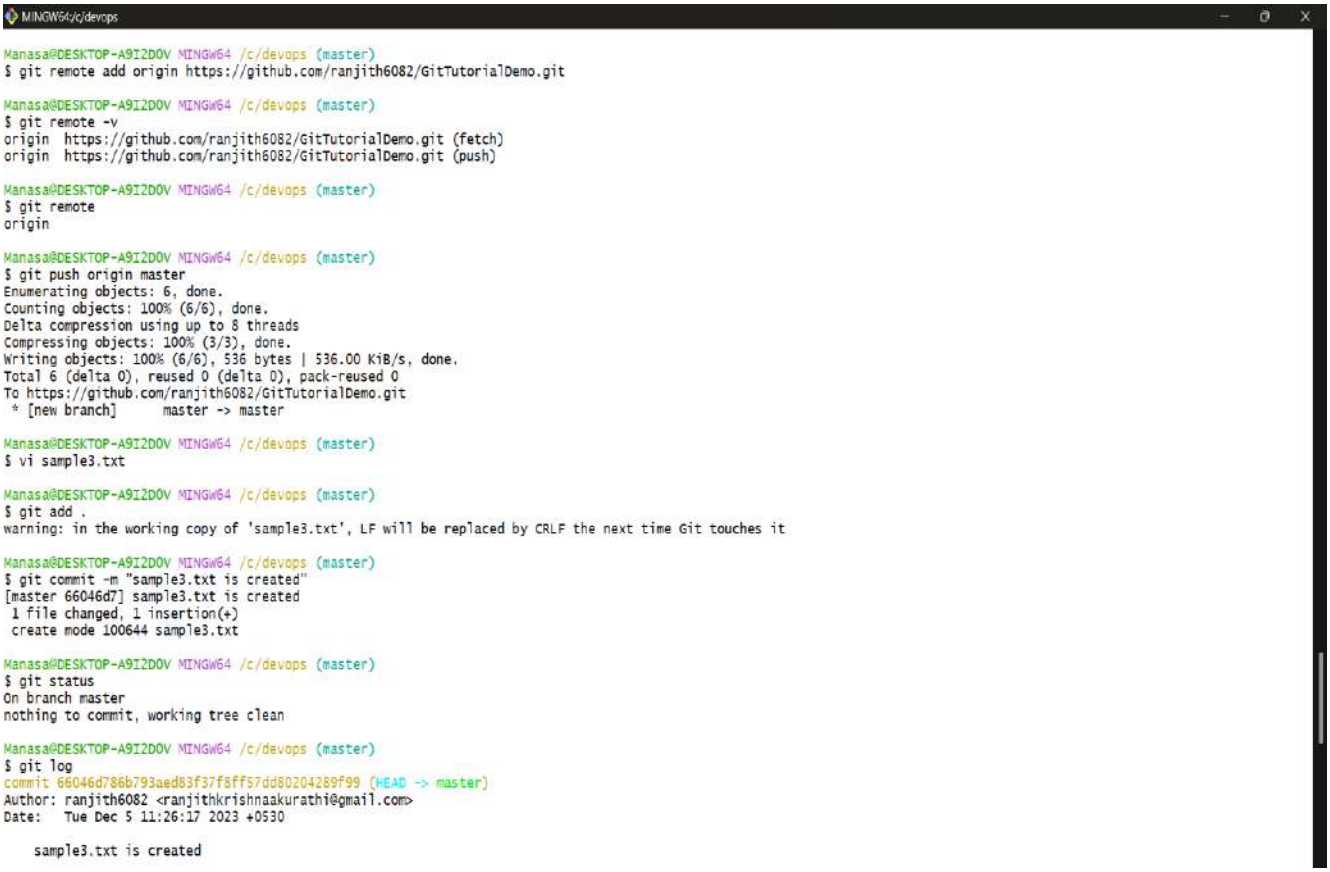

MINGW64:/c/devops
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git log
commit 1b705774757f60f9dd4a84d8de62f1c85b9af358 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:39:16 2023 +0530
sample1 file is commit
commit a06a3e5d440e00ddi521f47c303d41a7d0786de2
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git add .
warning: in the working copy of 'demo1.txt', LF will be replaced by CRLF the next time Git touches it
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git commit -m "demo1 file is update"
[master beaeed7] demo1 file is update
1 file changed, 0 insertions(+), 0 deletions(-)
rename sample1.txt => demo1.txt (100%)
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
nothing to commit, working tree clean
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git log
commit beaeed73352b75aced73c5d7871187ac642795be (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:41:34 2023 +0530
demo1 file is update
commit 1b705774757f60f9dd4a84d8de62f1c85b9af358
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:39:16 2023 +0530
sample1 file is commit
commit a06a3e5d440e00ddi521f47c303d41a7d0786de2
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added


MINGW64:/c/devops
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git reset 1b705774757f60f9dd4a84d8de62f1c85b9af358
Unstaged changes after reset:
D sample1.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git log
commit 1b705774757f60f9dd4a84d8de62f1c85b9af358 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:39:16 2023 +0530
sample1 file is commit
commit a06a3e5d440e00dd1521f47c303d41a7d0786de2
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git reset a06a3e5d440e00dd1521f47c303d41a7d0786de2
Unstaged changes after reset:
D sample1.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git log
commit a06a3e5d440e00dd1521f47c303d41a7d0786de2 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
Changes not staged for commit:
(use "git add/rm <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
deleted: sample1.txt
Untracked files:
(use "git add <file>..." to include in what will be committed)
demo1.txt
no changes added to commit (use "git add" and/or "git commit -a")
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git add .

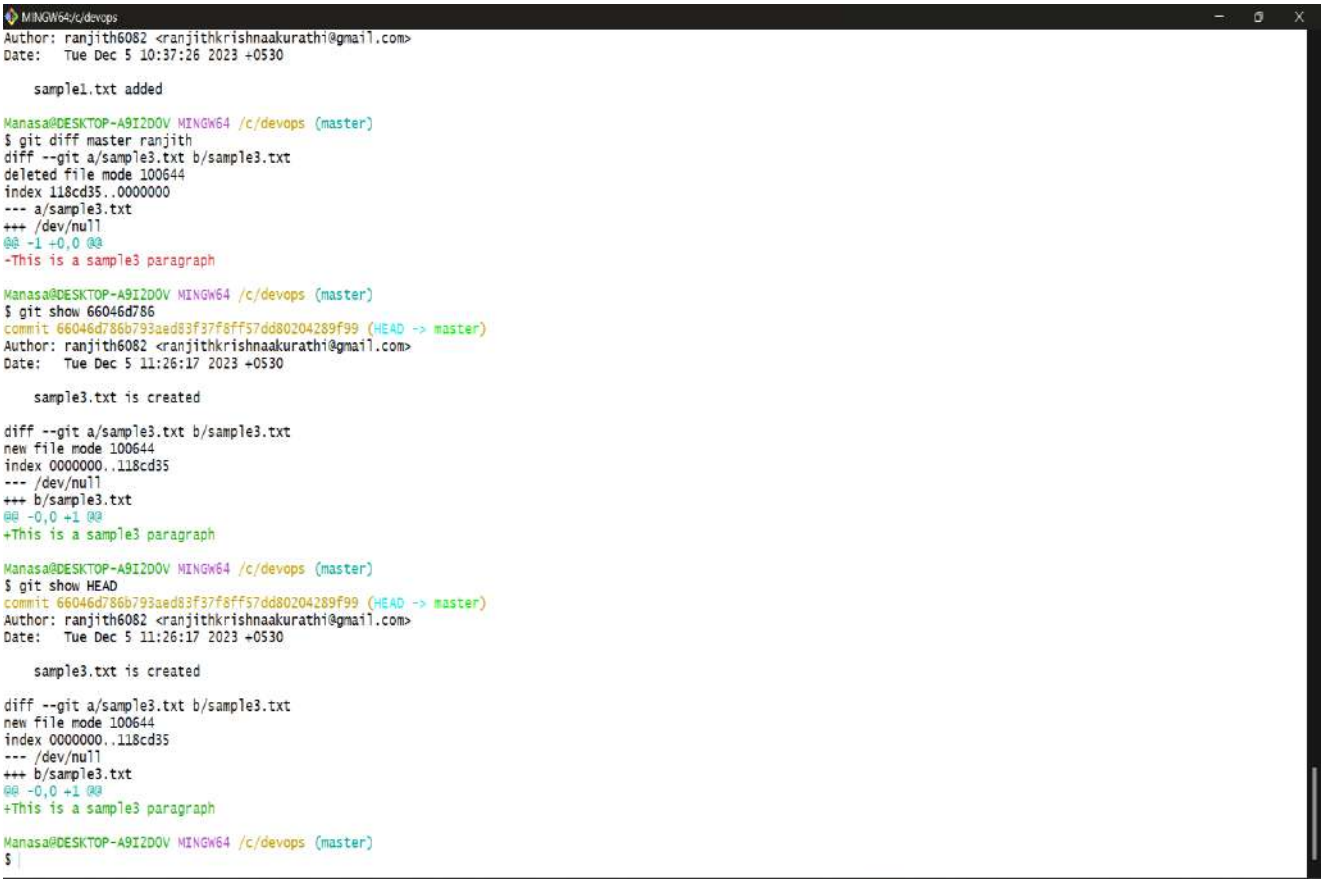

MINGW64:/c/devops
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git add .
warning: in the working copy of 'demo1.txt', LF will be replaced by CRLF the next time Git touches it
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
Changes to be committed:
(use "git restore --staged <file>..." to unstage)
renamed: sample1.txt -> demo1.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git stash
Saved working directory and index state WIP on master: a06a3e5 sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
nothing to commit, working tree clean
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git stash pop
On branch master
Changes to be committed:
(use "git restore --staged <file>..." to unstage)
new file: demo1.txt
Changes not staged for commit:
(use "git add/rm <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
deleted: sample1.txt
Dropped refs/stash@{0} (16968c8c7339c732666a2dc2c426a717183a6c78)
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
Changes to be committed:
(use "git restore --staged <file>..." to unstage)
new file: demo1.txt
Changes not staged for commit:
(use "git add/rm <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
deleted: sample1.txt


MINGW64:/c/devops
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git stash
Saved working directory and index state WIP on master: a06a3e5 sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git stash clear
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git status
On branch master
nothing to commit, working tree clean
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git branch ranjith
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git checkout ranjith
Switched to branch 'ranjith'
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ git status
On branch ranjith
nothing to commit, working tree clean
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ git log
commit a06a3e5d440e00dd1521f47c303d41a7d0786de2 (HEAD -> ranjith, master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ vi sample2.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ git add .
warning: in the working copy of 'sample2.txt', LF will be replaced by CRLF the next time Git touches it
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ git commit -m "sample2.txt is created"
[ranjith 3534082] sample2.txt is created
1 file changed, 1 insertion(+)
create mode 100644 sample2.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ git log
commit 3534082f0ba2f2e6e4a9bf68b92d1ae546b67fe9 (HEAD -> ranjith)


MINGW64:/c/devops
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ git log
commit 3534082f0ba2f2e6e4a9bf68b92d1ae546b67fe9 (HEAD -> ranjith)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:09:18 2023 +0530
sample2.txt is created
commit a06a3e5d440e00dd1521f47c303d41a7d0786de2 (master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (ranjith)
$ git checkout master
Switched to branch 'master'
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git log
commit a06a3e5d440e00dd1521f47c303d41a7d0786de2 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git merge ranjith
Updating a06a3e5..3534082
Fast-forward
sample2.txt | 1 +
1 file changed, 1 insertion(+)
create mode 100644 sample2.txt
Manasa@DESKTOP-A9I2DOV MINGW64 /c/devops (master)
$ git log
commit 3534082f0ba2f2e6e4a9bf68b92d1ae546b67fe9 (HEAD -> master, ranjith)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:09:18 2023 +0530
sample2.txt is created
commit a06a3e5d440e00dd1521f47c303d41a7d0786de2
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added


MINGW64:/c/devops
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git remote add origin https://github.com/ranjith6082/GitTutorialDemo.git
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git remote -v
origin https://github.com/ranjith6082/GitTutorialDemo.git (fetch)
origin https://github.com/ranjith6082/GitTutorialDemo.git (push)
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git remote
origin
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git push origin master
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 536 bytes | 536.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ranjith6082/GitTutorialDemo.git
* [new branch] master -> master
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ vi sample3.txt
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git add .
warning: in the working copy of 'sample3.txt', LF will be replaced by CRLF the next time Git touches it
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git commit -m "sample3.txt is created"
[master 66046d7] sample3.txt is created
1 file changed, 1 insertion(+)
create mode 100644 sample3.txt
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git status
On branch master
nothing to commit, working tree clean
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git log
commit 66046d786b793aed83f37f8ff57dd80204289f99 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:26:17 2023 +0530
sample3.txt is created


MINGW64:/c/devops
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git log
commit 66046d786b793aed83f37f8ff57dd80204289f99 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:26:17 2023 +0530
sample3.txt is created
commit 3534082f0ba2f2e6e4a8bf68b92d1ae546b67fe9 (origin/master, ranjith)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:09:18 2023 +0530
sample2.txt is created
commit a06a3e5d440e00dd1521f47c303d41a7d0786de2
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git diff master ranjith
diff --git a/sample3.txt b/sample3.txt
deleted file mode 100644
index 118cd35..0000000
--- a/sample3.txt
+++ /dev/null
@@ -1 +0,0 @@
-This is a sample3 paragraph
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git show 66046d786
commit 66046d786b793aed83f37f8ff57dd80204289f99 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:26:17 2023 +0530
sample3.txt is created
diff --git a/sample3.txt b/sample3.txt
new file mode 100644
index 0000000..118cd35
--- /dev/null
+++ b/sample3.txt
@@ -0,0 +1 @@
+This is a sample3 paragraph
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git show HEAD


MINGW64:/c/devops
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 10:37:26 2023 +0530
sample1.txt added
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git diff master ranjith
diff --git a/sample3.txt b/sample3.txt
deleted file mode 100644
index 118cd35..0000000
--- a/sample3.txt
+++ /dev/null
@@ -1 +0,0 @@
-This is a sample3 paragraph
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git show 66046d786
commit 66046d786b793aed83f37f8ff57dd80204289f99 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:26:17 2023 +0530
sample3.txt is created
diff --git a/sample3.txt b/sample3.txt
new file mode 100644
index 0000000..118cd35
--- /dev/null
+++ b/sample3.txt
@@ -0,0 +1 @@
+This is a sample3 paragraph
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$ git show HEAD
commit 66046d786b793aed83f37f8ff57dd80204289f99 (HEAD -> master)
Author: ranjith6082 <ranjithkrishnaakurathi@gmail.com>
Date: Tue Dec 5 11:26:17 2023 +0530
sample3.txt is created
diff --git a/sample3.txt b/sample3.txt
new file mode 100644
index 0000000..118cd35
--- /dev/null
+++ b/sample3.txt
@@ -0,0 +1 @@
+This is a sample3 paragraph
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops (master)
$

Experiment:2

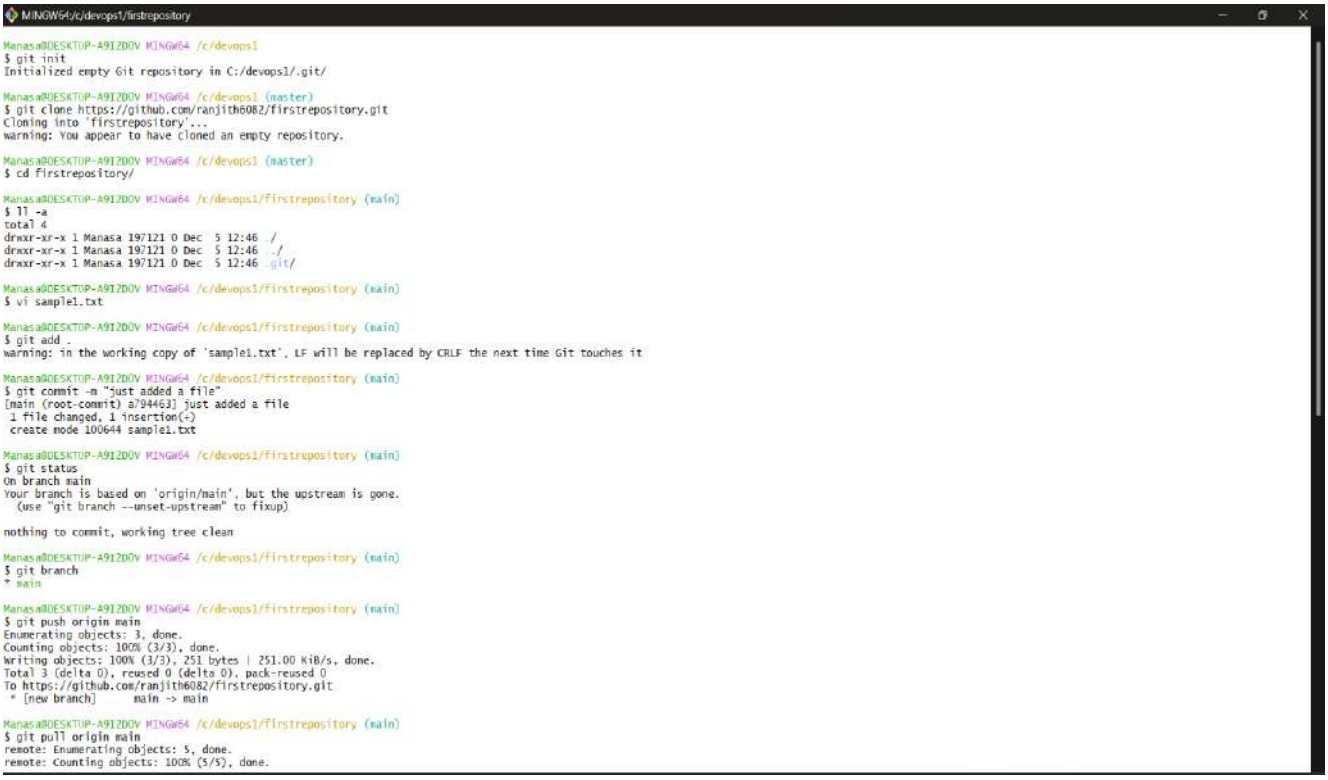
2. Demonstrate working with remote repositories

Procedure:

Working with remote repository:

➔ Accessing remote repository**:**

$ git clone <github repo url>:to access to the remote repository

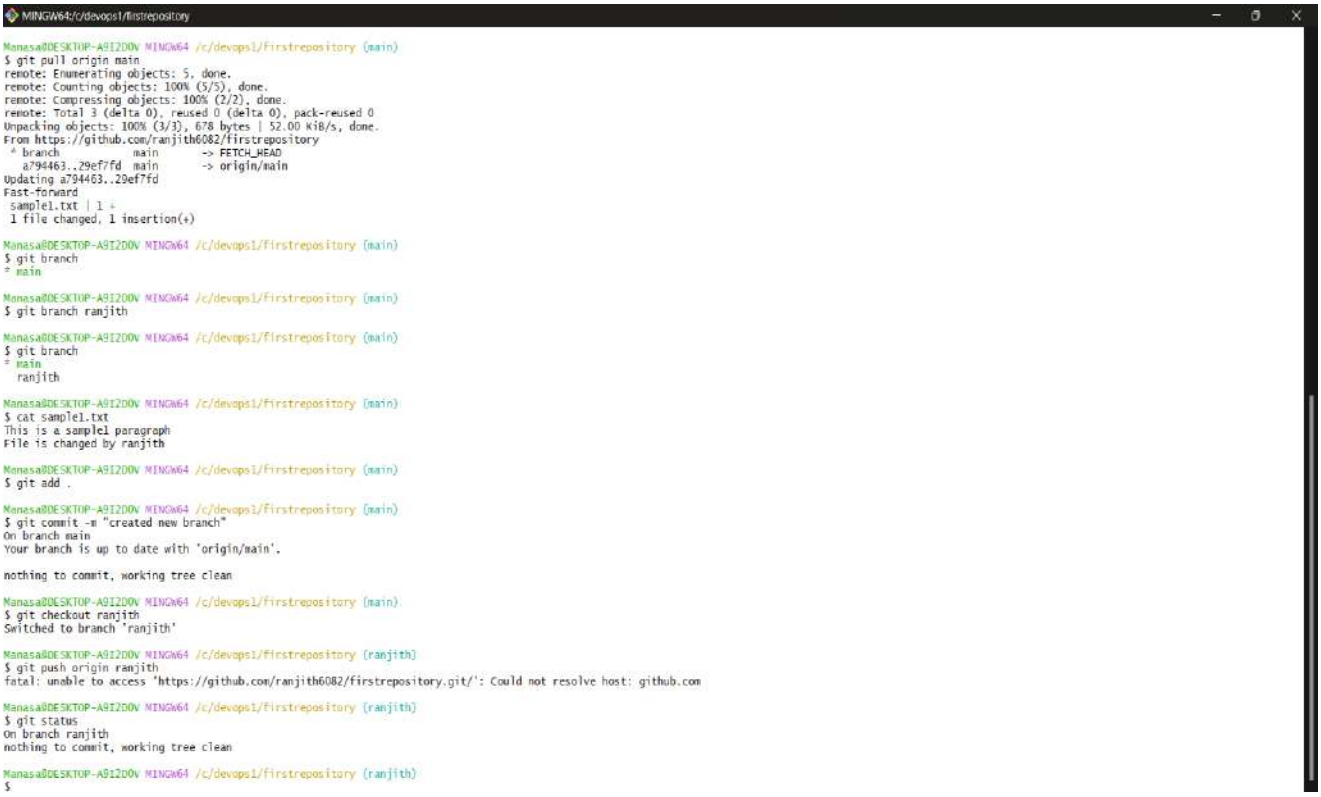


➔ git push:

command is used to push the changes from your local branch (usually named"main") to the remote repository (typically named "origin")

It will push commit files to the cloned repository else it will “everything is upto thedate

So before pushing we should add and commit the files which are newly added in local repository



➔ Mapping local repository with remote repository:

To map local repository with remote repository first create a local repository

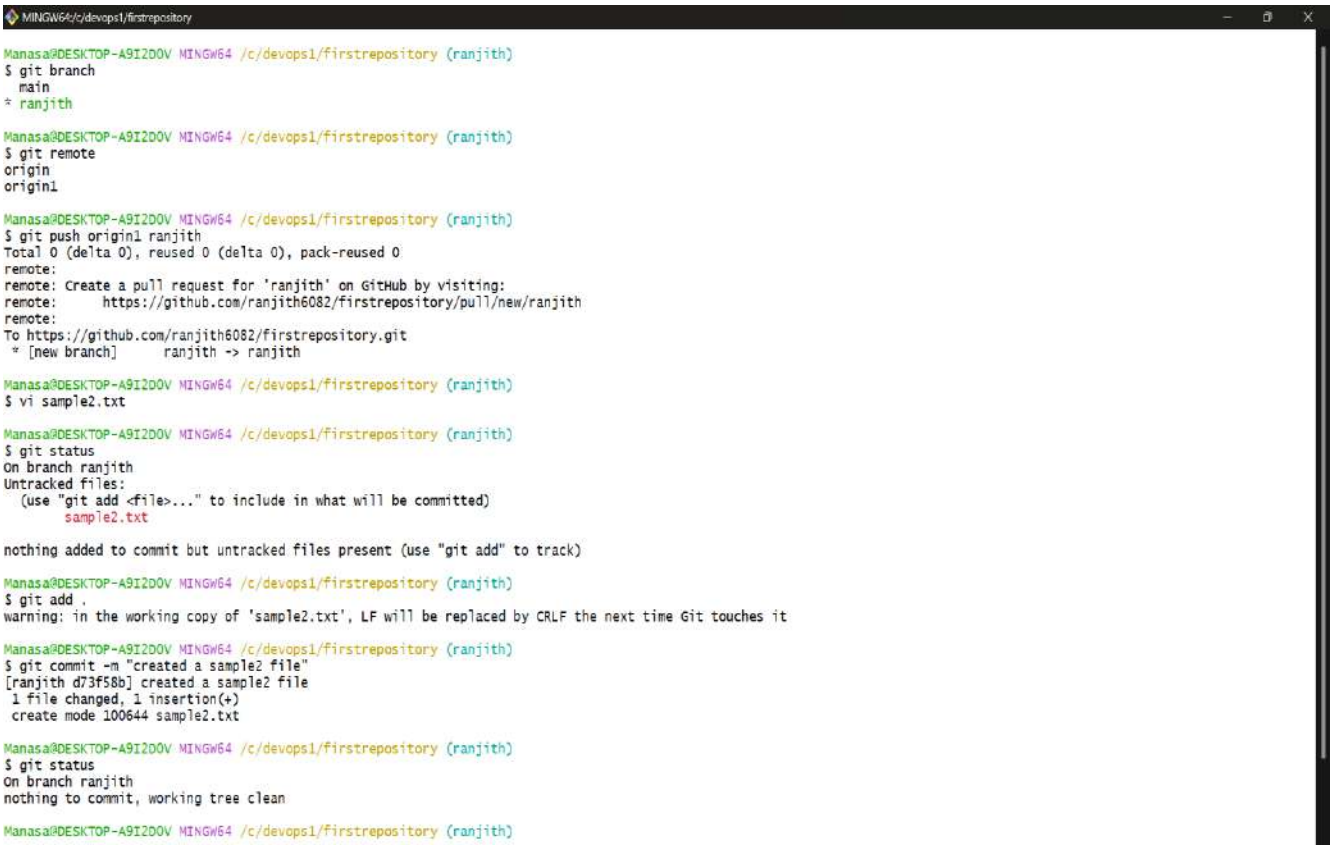
Then initialize using “git init”

Then we can find configuration details in file “config”

using following command we can map local repository with remote repo:

$ git remote add origin <github url/reponame.git>

we can find the procedure in the below snapshot



➔ pushing a new local file to remote repository:

create a new text file using “cat>filename”

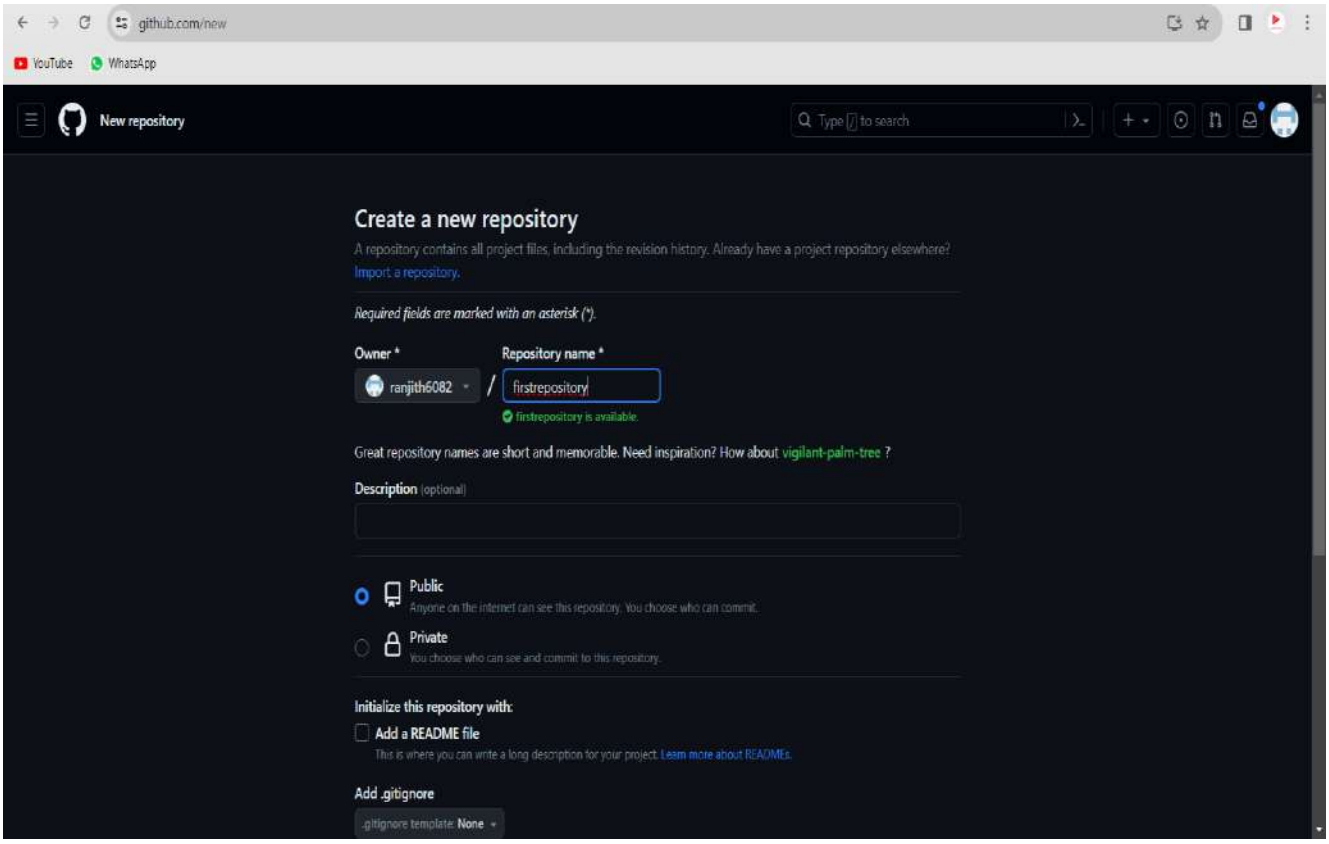
Then stage and commit the created file using “add” and “commit” commands

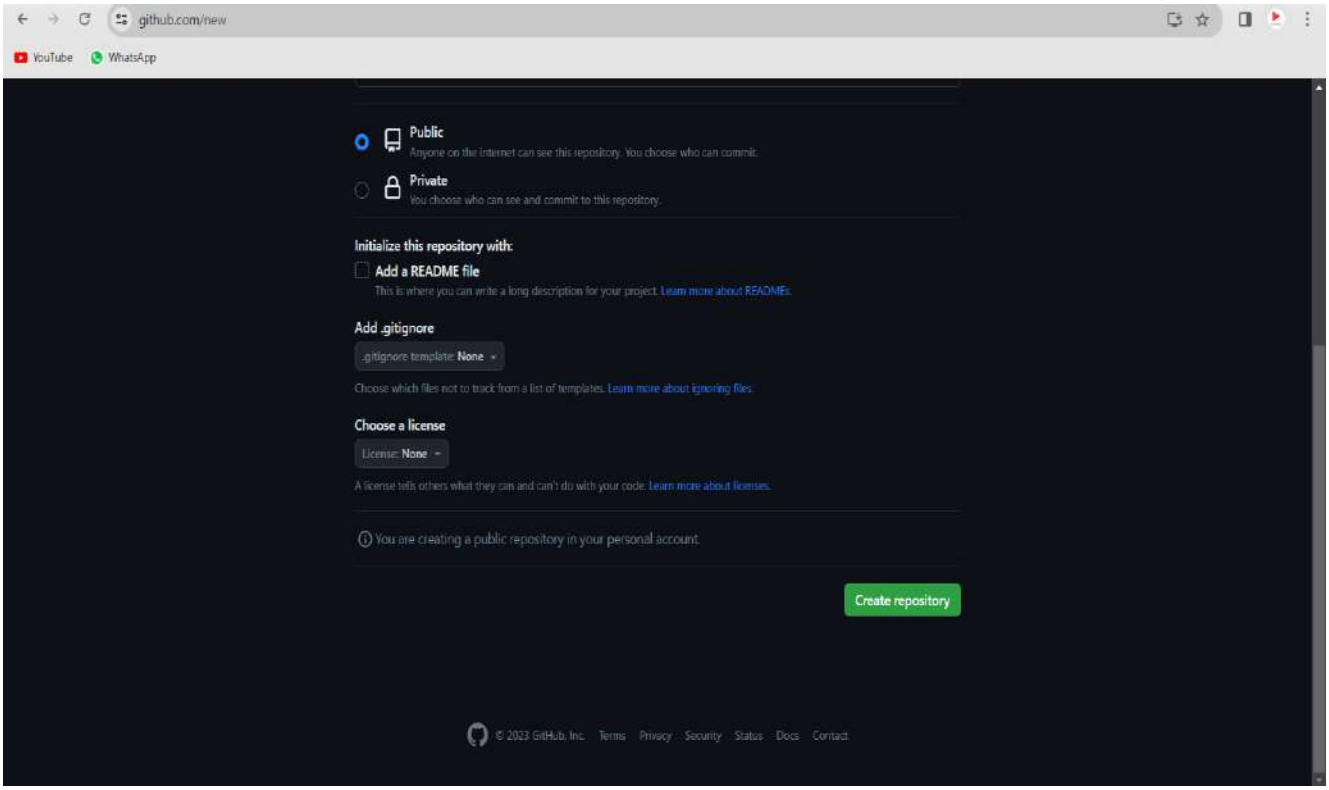
using push command push the commit files using “git push origin main”

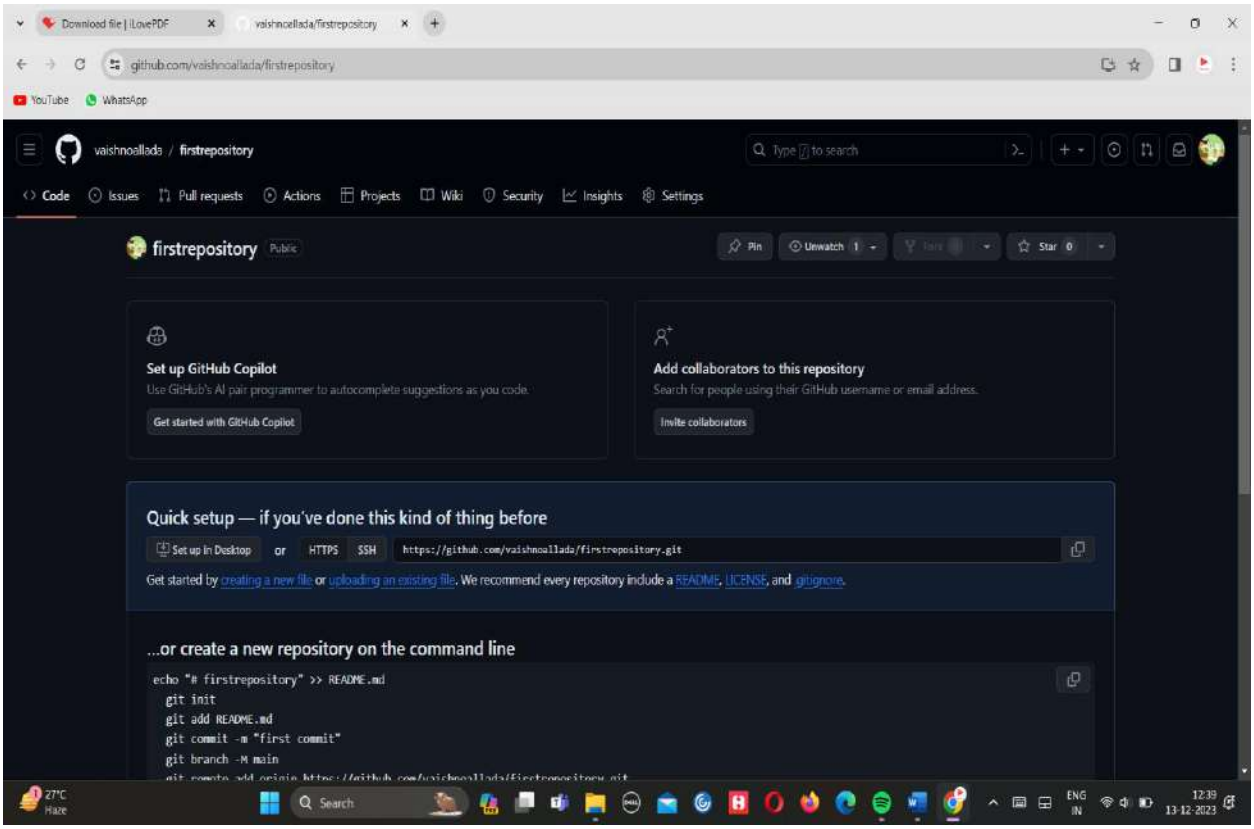
Then in github repository we can see pushed files

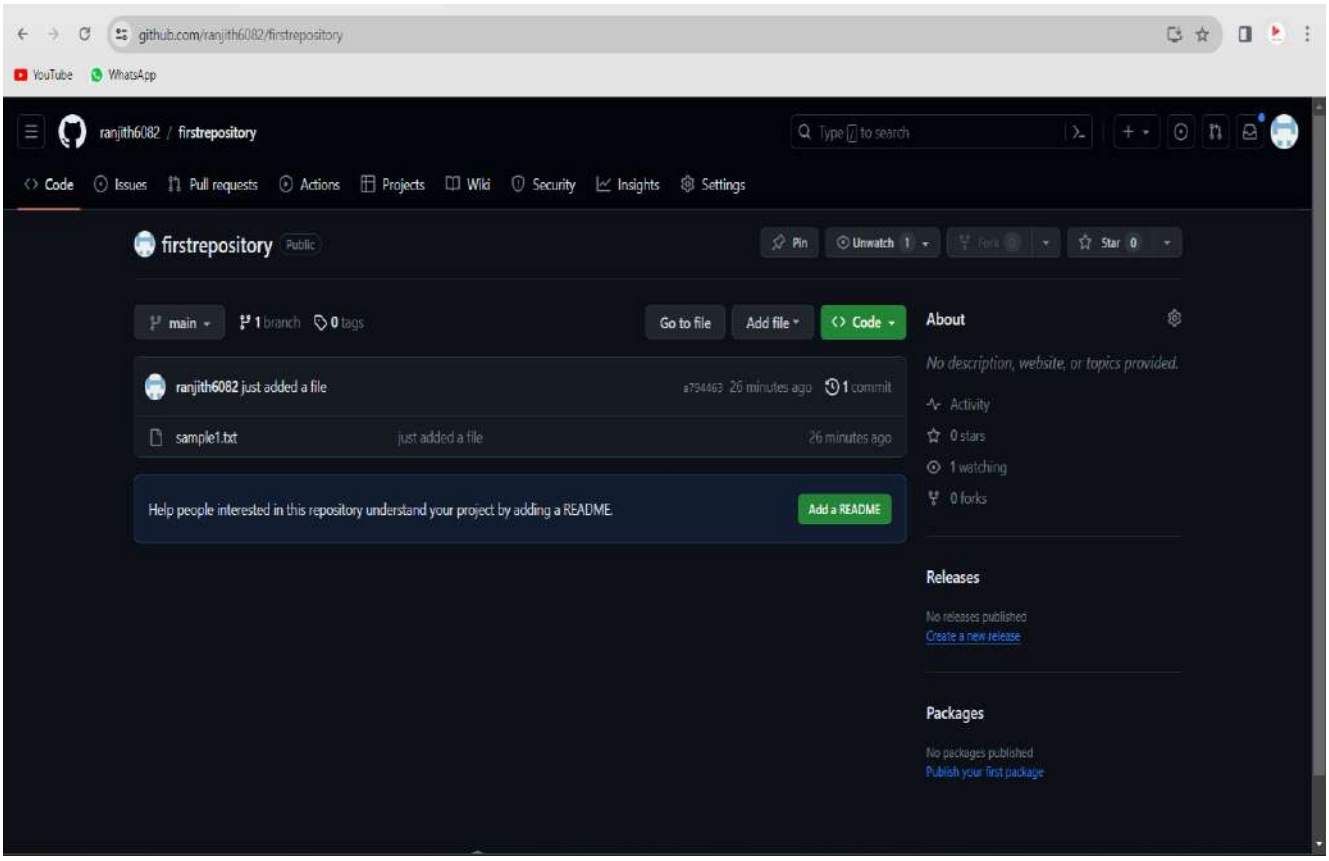
In Git, **HEAD** is a special pointer or reference that points to the latest commit in the currently checked-out branch. It essentially represents the "tip" or the mostrecent commit on the branch.

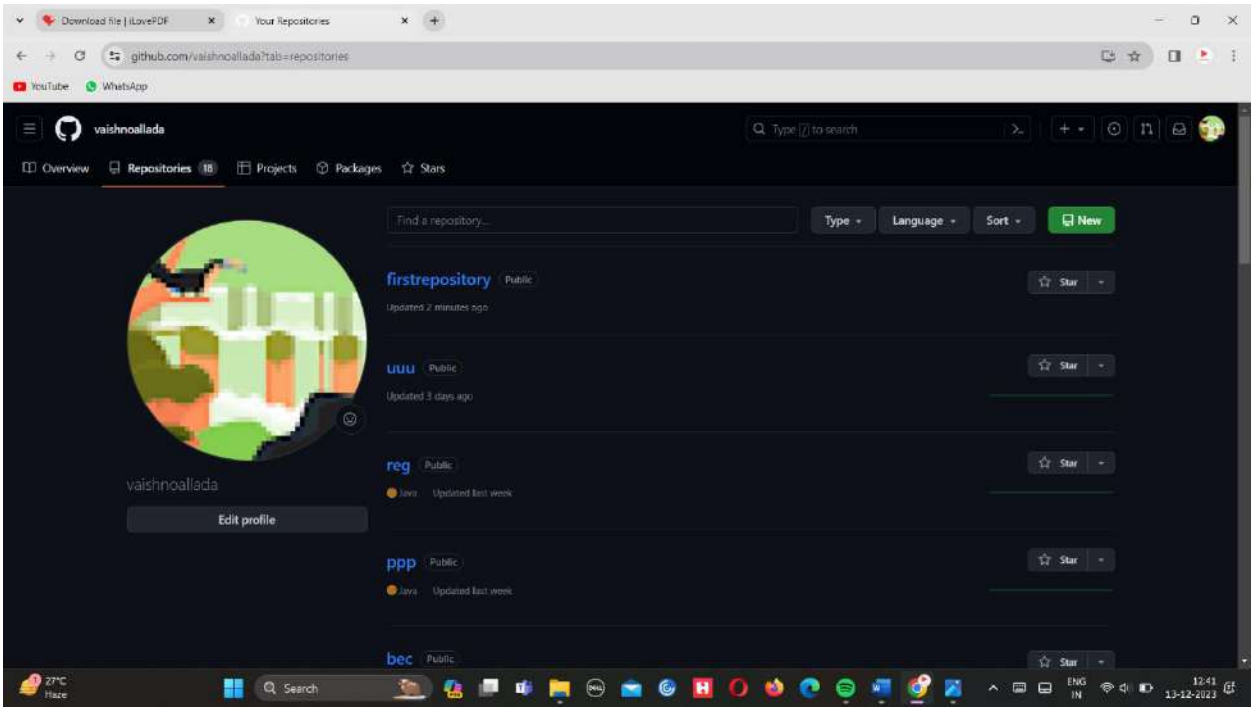

MINGW64:/c/devops1/firstrepository
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops1/firstrepository (ranjith)
$ git push origin1 ranjith
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 311 bytes | 311.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ranjith6082/firstrepository.git
29ef7fd..d73f58b ranjith -> ranjith
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops1/firstrepository (ranjith)
$ git status
On branch ranjith
nothing to commit, working tree clean
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops1/firstrepository (ranjith)
$ git fetch origin1
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 720 bytes | 60.00 KiB/s, done.
From https://github.com/ranjith6082/firstrepository
* [new branch] main -> origin1/main
d73f58b..95f553f ranjith -> origin1/ranjith
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops1/firstrepository (ranjith)
$ git merge origin1/ranjith
Updating d73f58b..95f553f
Fast-forward
sample2.txt | 1 +
1 file changed, 1 insertion(+)
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops1/firstrepository (ranjith)
$ cat sample2.txt
This is a sample2 paragraph
Content modified by some other user
Manasa@DESKTOP-A9I2D0V MINGW64 /c/devops1/firstrepository (ranjith)
$

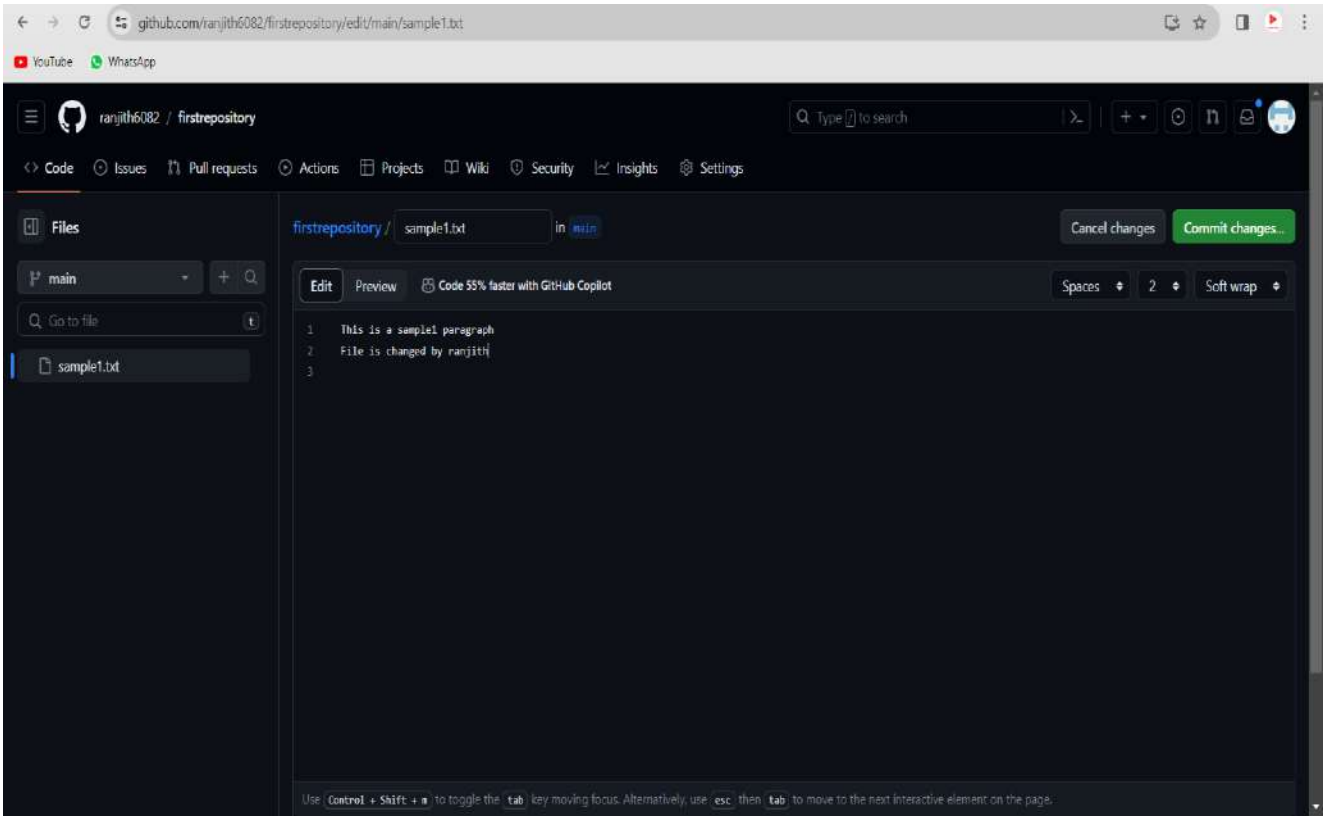

github.com/new
YouTube
WhatsApp
New repository
Type / to search
Create a new repository
A repository contains all project files, including the revision history. Already have a project repository elsewhere?
Import a repository.
Required fields are marked with an asterisk (*).
Owner *
Repository name *
ranjith6082
/
firstrepository
firstrepository is available.
Great repository names are short and memorable. Need inspiration? How about vigilant-palm-tree ?
Description (optional)
Public
Anyone on the internet can see this repository. You choose who can commit.
Private
You choose who can see and commit to this repository.
Initialize this repository with:
Add a README file
This is where you can write a long description for your project. Learn more about READMEs.
Add .gitignore
.gitignore template: None

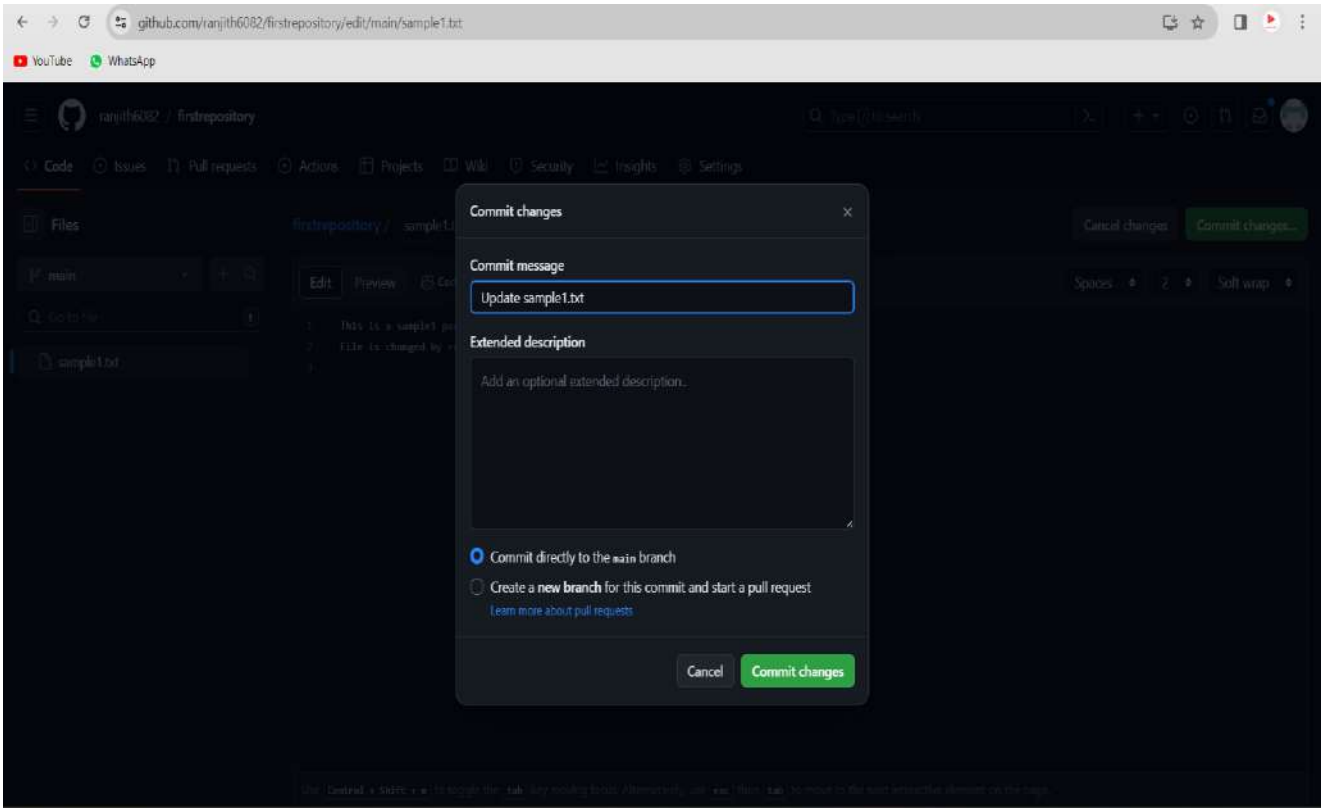

github.com/new
YouTube
WhatsApp
Public
Anyone on the internet can see this repository. You choose who can commit.
Private
You choose who can see and commit to this repository.
Initialize this repository with:
Add a README file
This is where you can write a long description for your project. Learn more about READMEs.
Add .gitignore
.gitignore template: None
Choose which files not to track from a list of templates. Learn more about ignoring files.
Choose a license
License: None
A license tells others what they can and can't do with your code. Learn more about licenses.
You are creating a public repository in your personal account.
Create repository
© 2023 GitHub, Inc. Terms Privacy Security Status Docs Contact

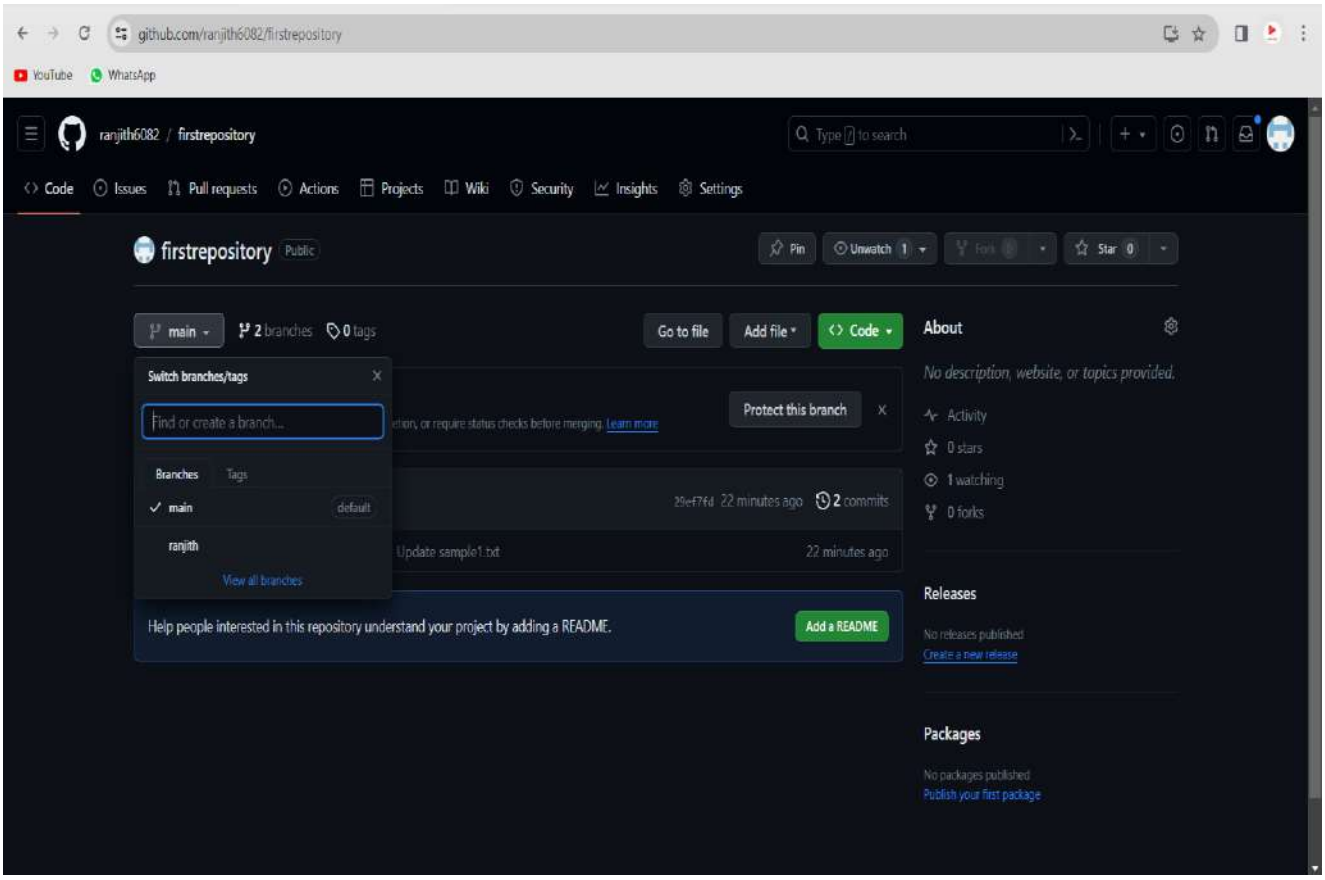

Download file | iLovePDF
vaishnoallada/firstrepository
github.com/vaishnoallada/firstrepository
YouTube
WhatsApp
vaishnoallada / firstrepository
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
firstrepository
Public
Pin
Unwatch 1
Star 0
Set up GitHub Copilot
Use GitHub's AI pair programmer to autocomplete suggestions as you code.
Get started with GitHub Copilot
Add collaborators to this repository
Search for people using their GitHub username or email address.
Invite collaborators
Quick setup — if you've done this kind of thing before
Set up in Desktop
or
HTTPS
SSH
https://github.com/vaishnoallada/firstrepository.git
Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.
...or create a new repository on the command line
echo "# firstrepository" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
27°C
Haze
Search
ENG
IN
12:39
13-12-2023

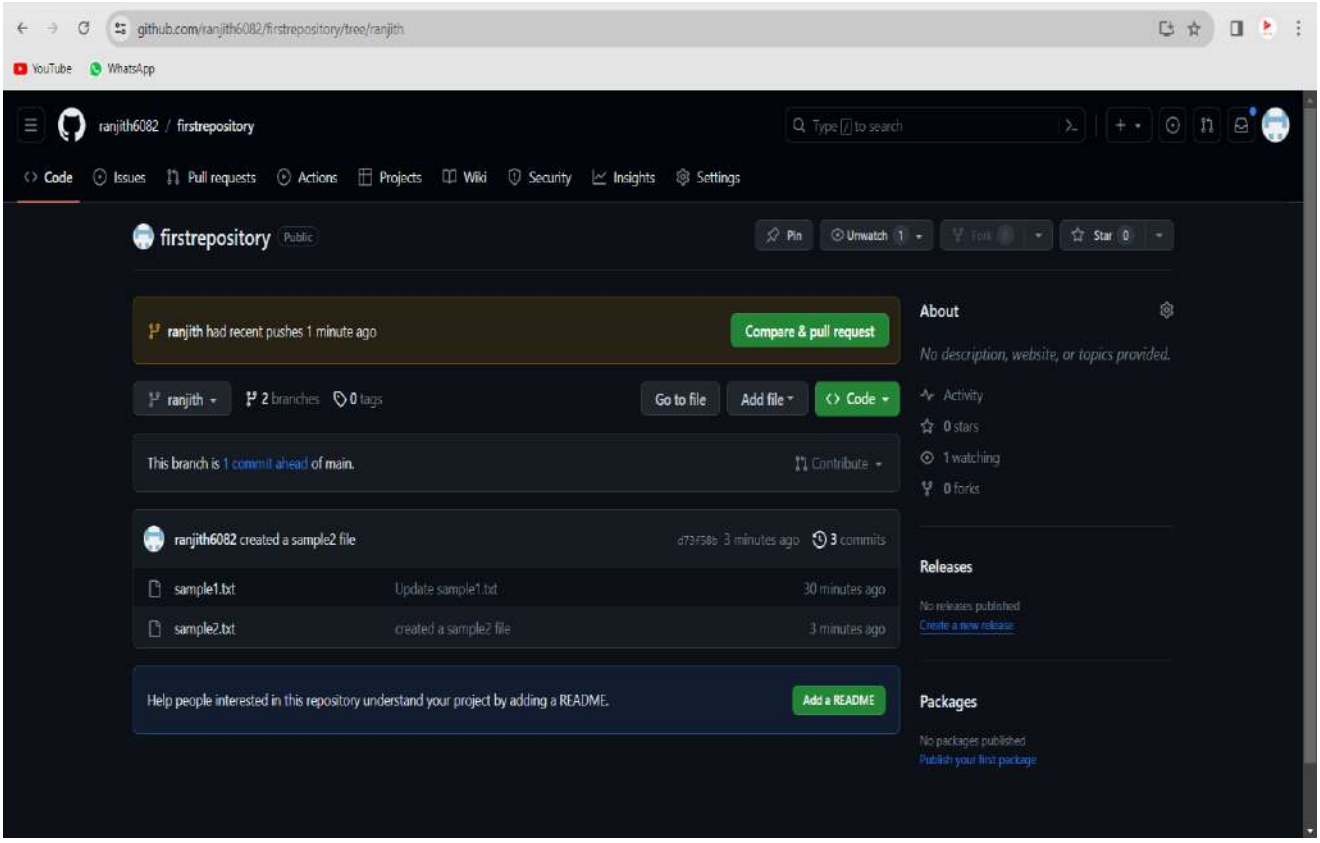

github.com/ranjith6082/firstrepository
YouTube
WhatsApp
ranjith6082 / firstrepository
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
firstrepository
Public
Pin
Unwatch 1
Star 0
main
1 branch
0 tags
Go to file
Add file
Code
About
No description, website, or topics provided.
ranjith6082 just added a file
a794463 26 minutes ago
1 commit
sample1.txt
just added a file
26 minutes ago
Activity
0 stars
1 watching
0 forks
Help people interested in this repository understand your project by adding a README.
Add a README
Releases
No releases published
Create a new release
Packages
No packages published
Publish your first package

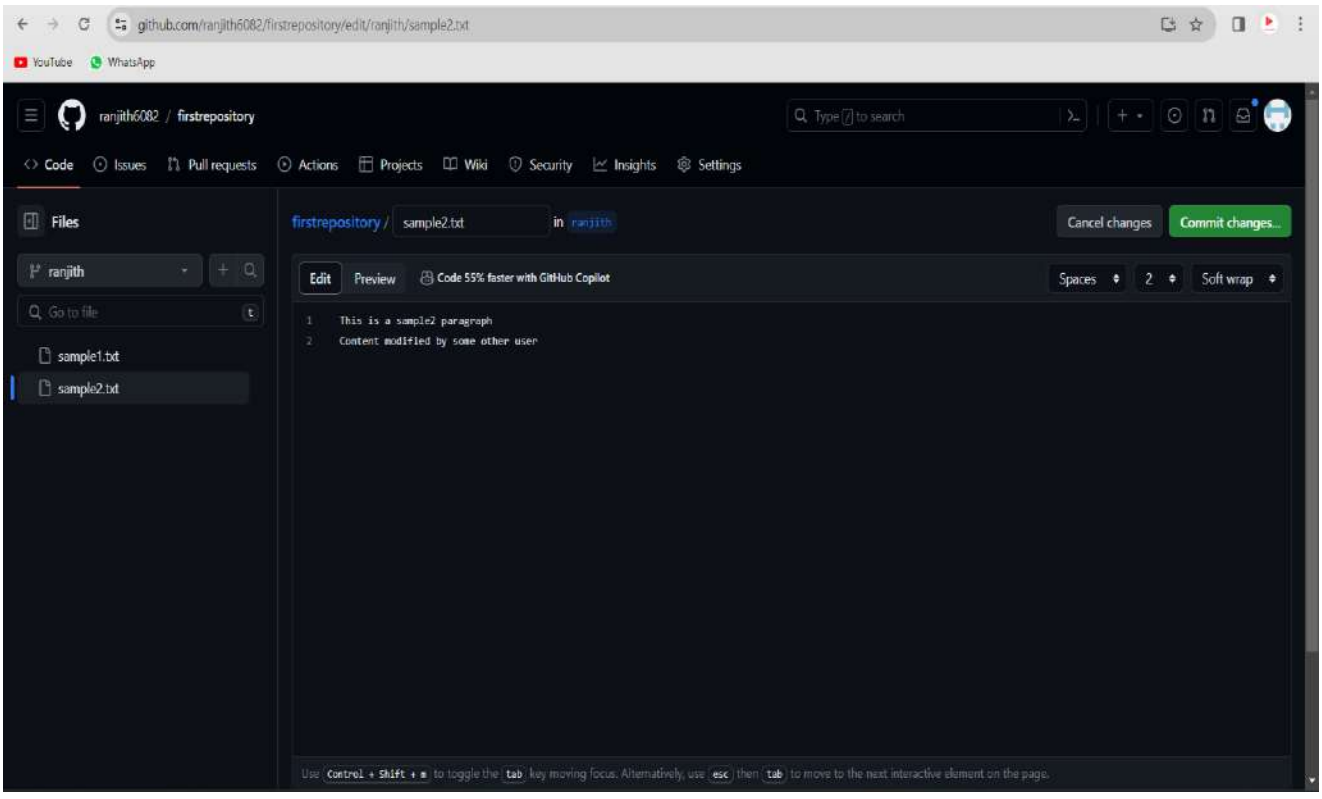

Download file | iLovePDF
Your Repositories
github.com/vaishnoallada?tab=repositories
YouTube
WhatsApp
vaishnoallada
Type / to search
Overview
Repositories 18
Projects
Packages
Stars
Find a repository...
Type
Language
Sort
New
firstrepository
Public
Updated 2 minutes ago
Star
uuu
Public
Updated 3 days ago
reg
Public
Updated last week
ppp
Public
Updated last week
bec
Public
vaishnoallada
Edit profile
27°C
Haze
Search
ENG
IN
12:41
13-12-2023

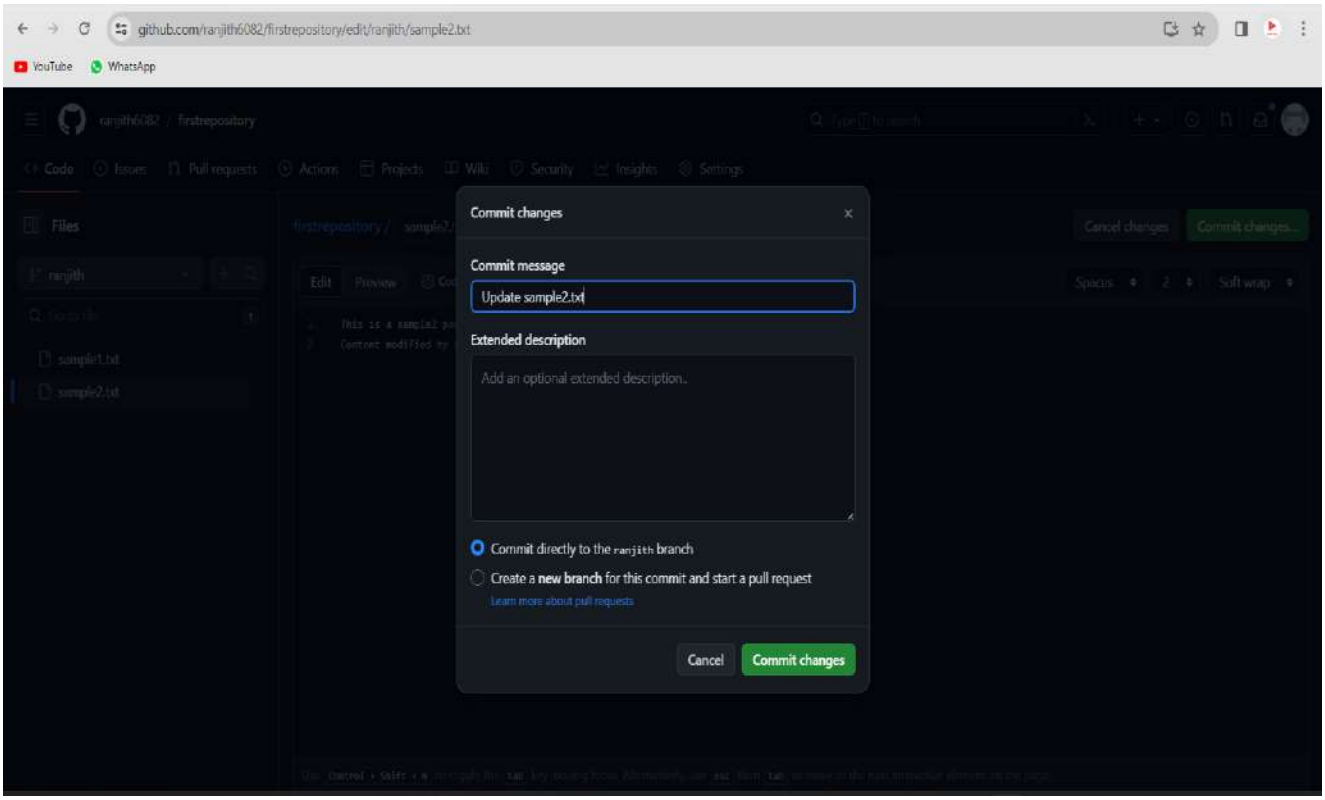

github.com/ranjith6082/firstrepository/edit/main/sample1.txt
YouTube
WhatsApp
ranjith6082 / firstrepository
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
Files
main
Go to file
sample1.txt
firstrepository / sample1.txt in main
Cancel changes
Commit changes...
Edit
Preview
Code 55% faster with GitHub Copilot
Spaces
2
Soft wrap
1 This is a sample1 paragraph
2 File is changed by ranjith
3
Use Control + Shift + m to toggle the tab key moving focus. Alternatively, use esc then tab to move to the next interactive element on the page.


github.com/ranjith6082/firstrepository/edit/main/sample1.txt
YouTube
WhatsApp
Commit changes
Commit message
Update sample1.txt
Extended description
Add an optional extended description...
Commit directly to the main branch
Create a new branch for this commit and start a pull request
Learn more about pull requests
Cancel
Commit changes


github.com/ranjith6082/firstrepository
YouTube
WhatsApp
ranjith6082 / firstrepository
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
firstrepository
Public
Pin
Unwatch 1
Star 0
main
2 branches
0 tags
Go to file
Add file
Code
About
No description, website, or topics provided.
Switch branches/tags
Find or create a branch...
Branches
Tags
main
default
ranjith
View all branches
Protect this branch
Activity
0 stars
1 watching
0 forks
29ef7fd 22 minutes ago
2 commits
Update sample1.txt
22 minutes ago
Releases
No releases published
Create a new release
Help people interested in this repository understand your project by adding a README.
Add a README
Packages
No packages published
Publish your first package


github.com/ranjith6082/firstrepository/tree/ranjith
YouTube
WhatsApp
ranjith6082 / firstrepository
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
firstrepository
Public
Pin
Unwatch 1
Fork 0
Star 0
ranjith had recent pushes 1 minute ago
Compare & pull request
ranjith
2 branches
0 tags
Go to file
Add file
Code
This branch is 1 commit ahead of main.
Contribute
ranjith6082 created a sample2 file
d73f58b 3 minutes ago
3 commits
sample1.txt
Update sample1.txt
30 minutes ago
sample2.txt
created a sample2 file
3 minutes ago
Help people interested in this repository understand your project by adding a README.
Add a README
About
No description, website, or topics provided.
Activity
0 stars
1 watching
0 forks
Releases
No releases published
Create a new release
Packages
No packages published
Publish your first package


github.com/ranjith6082/firstrepository/edit/ranjith/sample2.txt
YouTube
WhatsApp
ranjith6082 / firstrepository
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
Files
ranjith
Go to file
sample1.txt
sample2.txt
firstrepository / sample2.txt
in ranjith
Cancel changes
Commit changes...
Edit
Preview
Code 55% faster with GitHub Copilot
Spaces
2
Soft wrap
1 This is a sample2 paragraph
2 Content modified by some other user
Use Control + Shift + m to toggle the tab key moving focus. Alternatively, use esc then tab to move to the next interactive element on the page.


github.com/ranjith6082/firstrepository/edit/ranjith/sample2.txt
YouTube
WhatsApp
Commit changes
Commit message
Update sample2.txt
Extended description
Add an optional extended description..
Commit directly to the ranjith branch
Create a new branch for this commit and start a pull request
Learn more about pull requests
Cancel
Commit changes

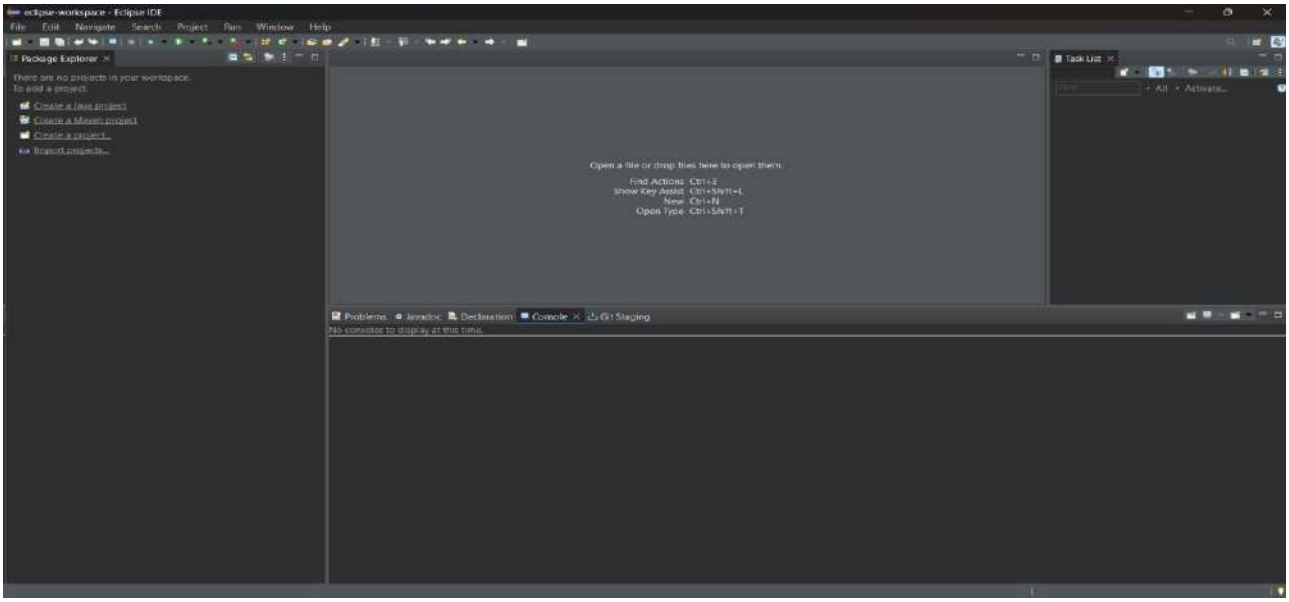
Experiment:3

3. Demonstrate Deploying an Application to GitHub.

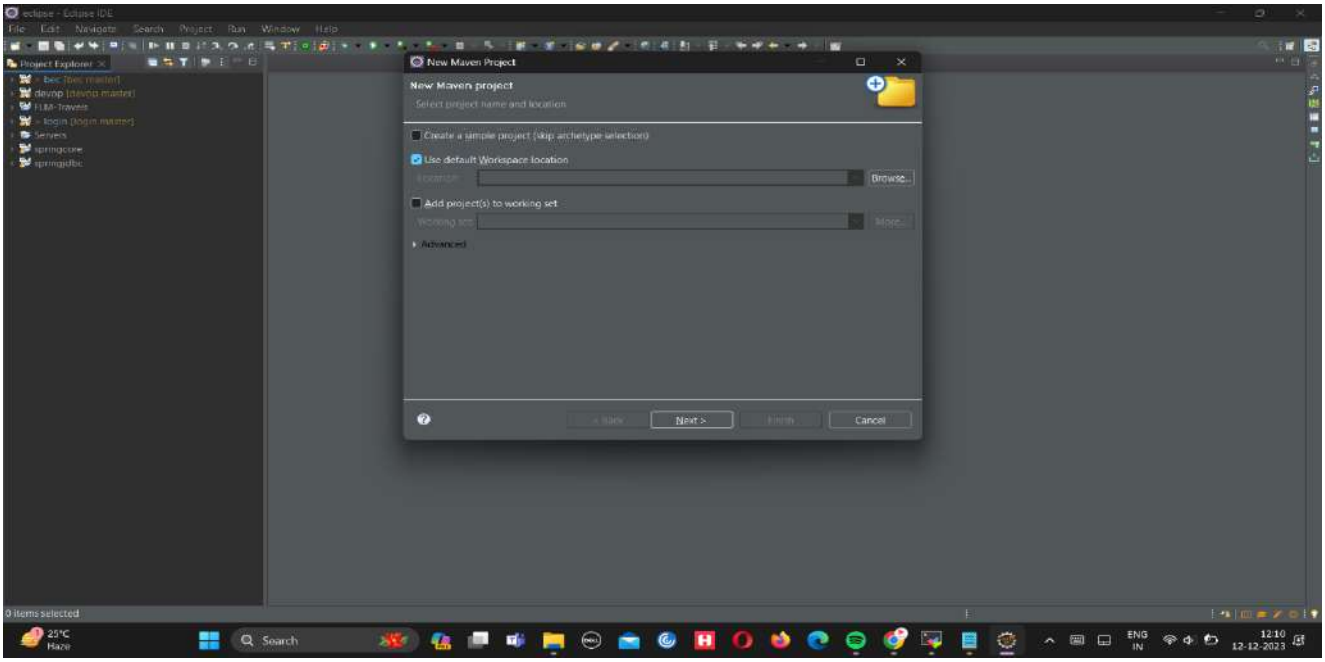
Procedure:

➔ To deploy an application to github we use ECLIPSE IDE

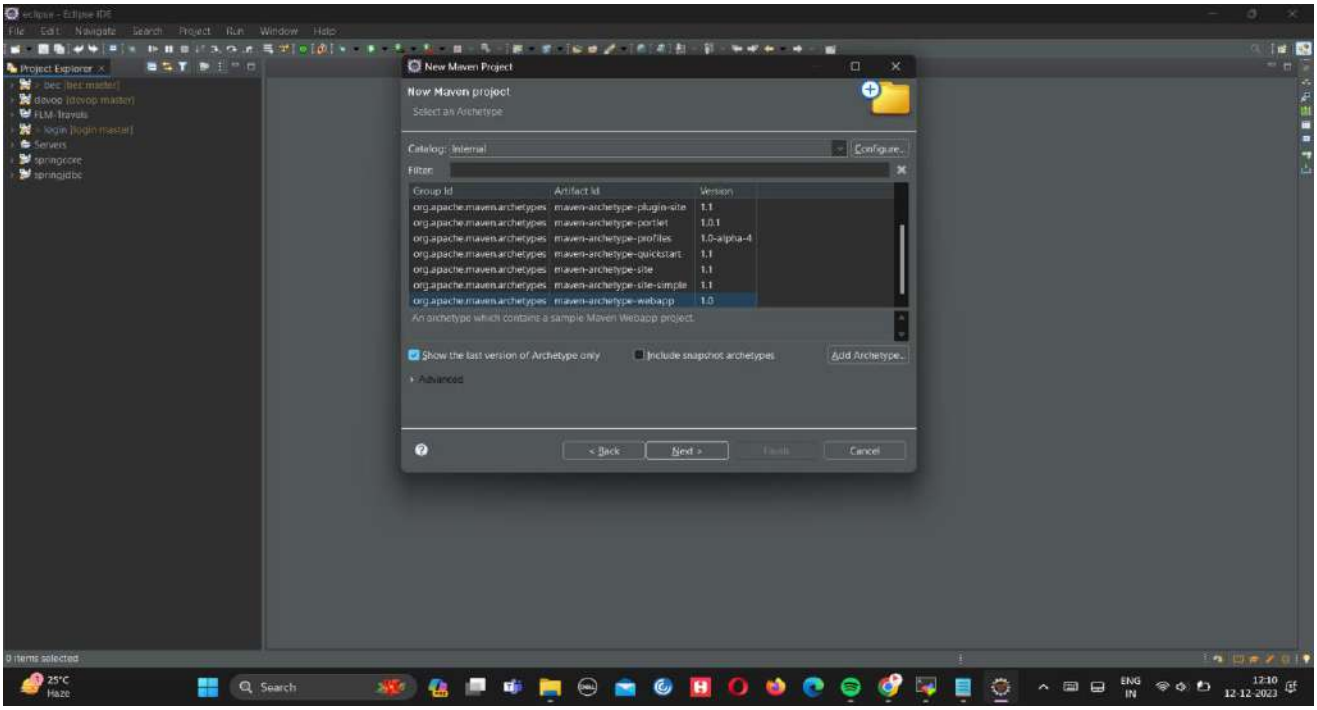
➔ In eclipse we can create maven project and can deploy them using following procedure



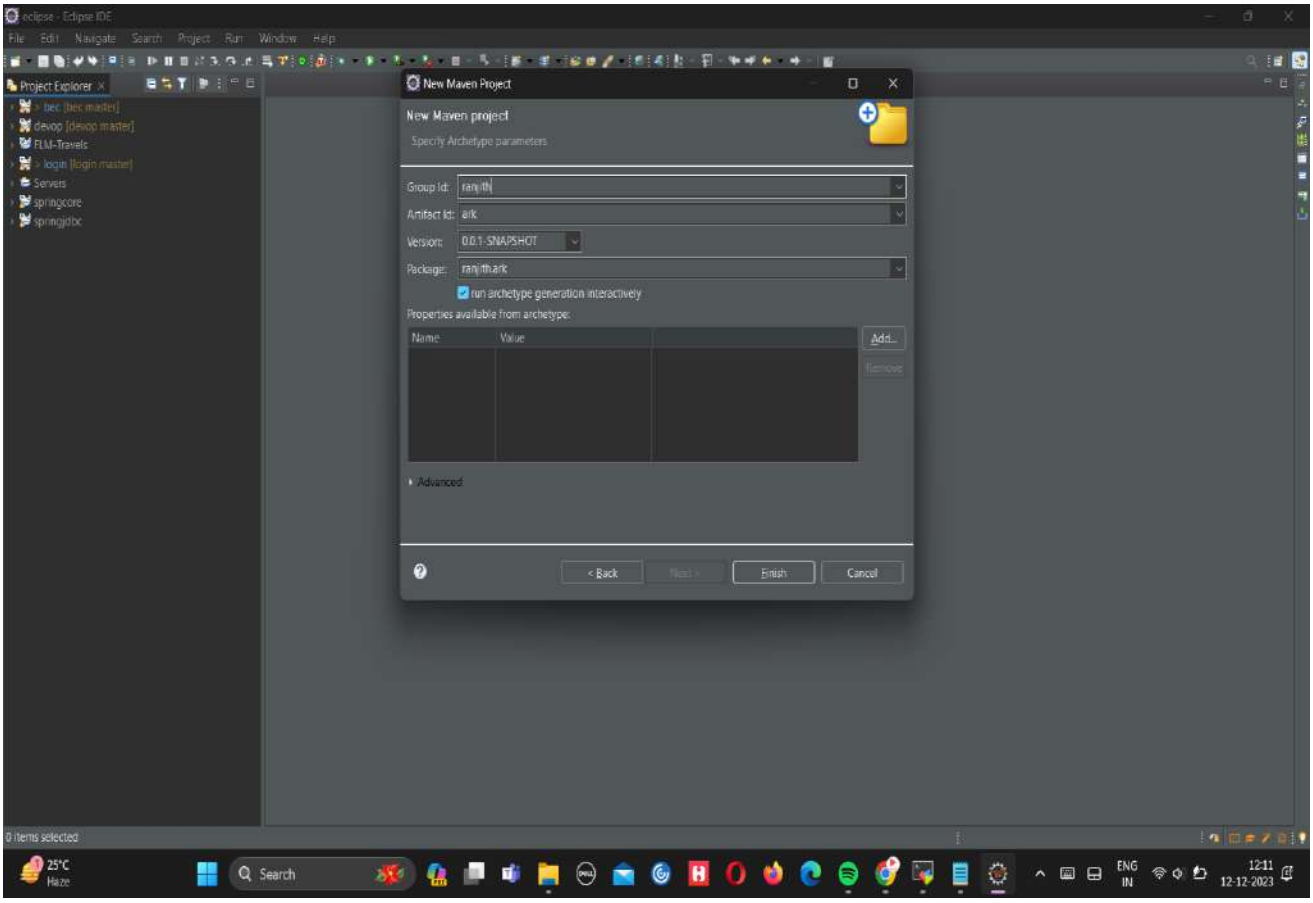
➔ Then it asks for New maven project to create in default location click on next



➔ Then it ask catalog select “internal” and filter is “webapp” select it and click next

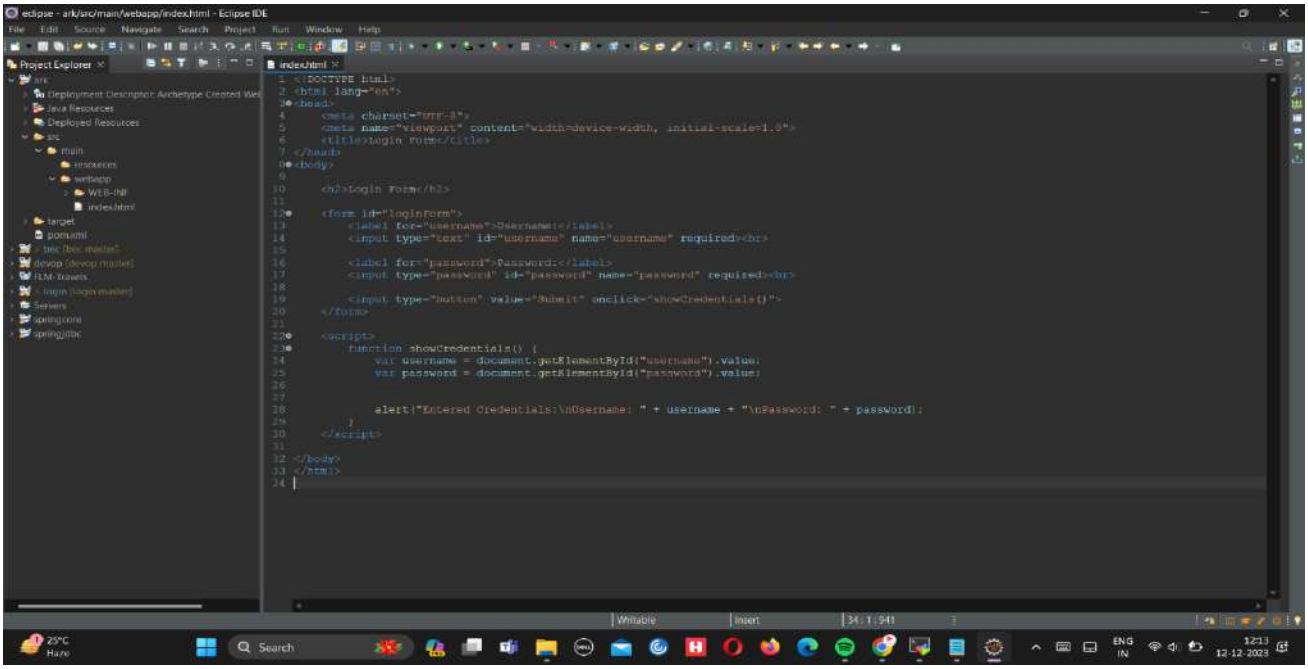


➔ Then it asks for Group id and artifact id give them as ur wish and then click on Finish



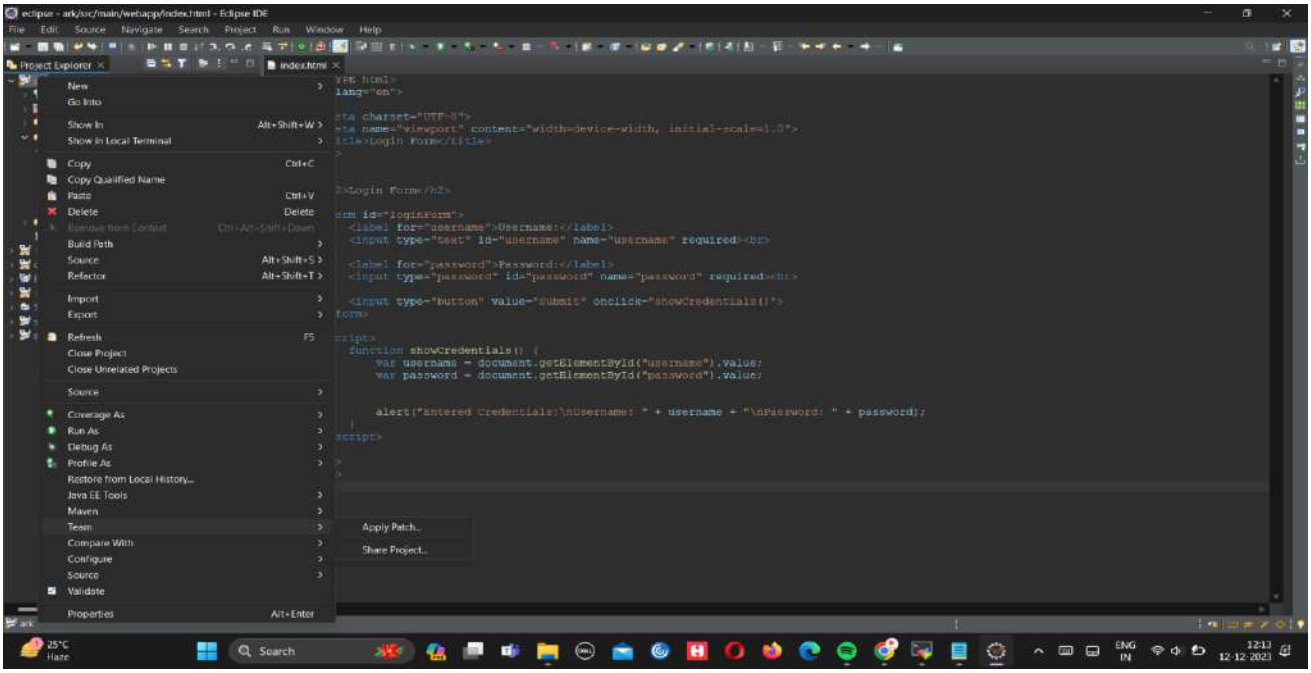
➔ Then the project is build is successful and in left side bar we can see our project in that our projectcode file is in

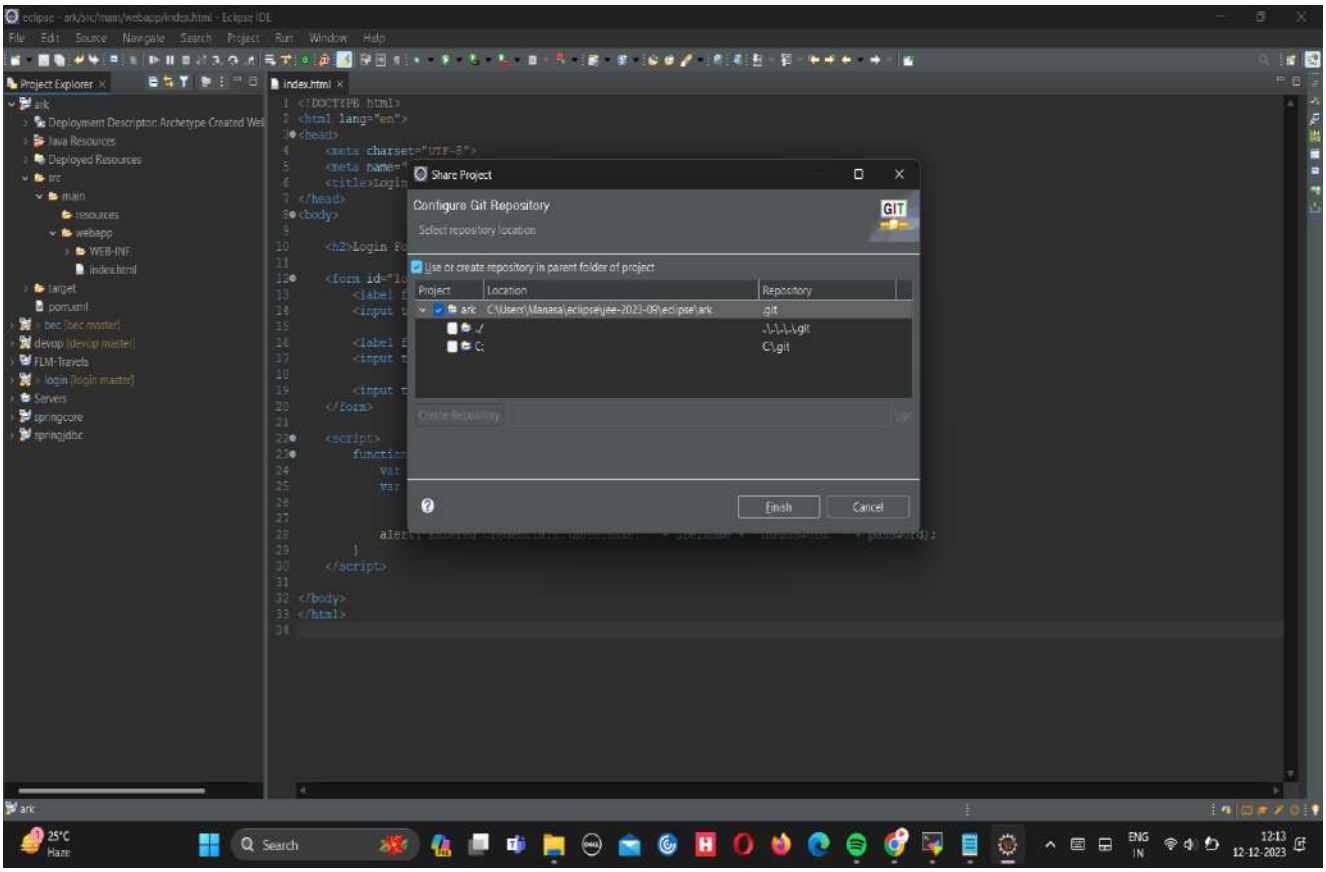
Project >>src>>main>>webapp>>index.jsp double click on it then the file will be open



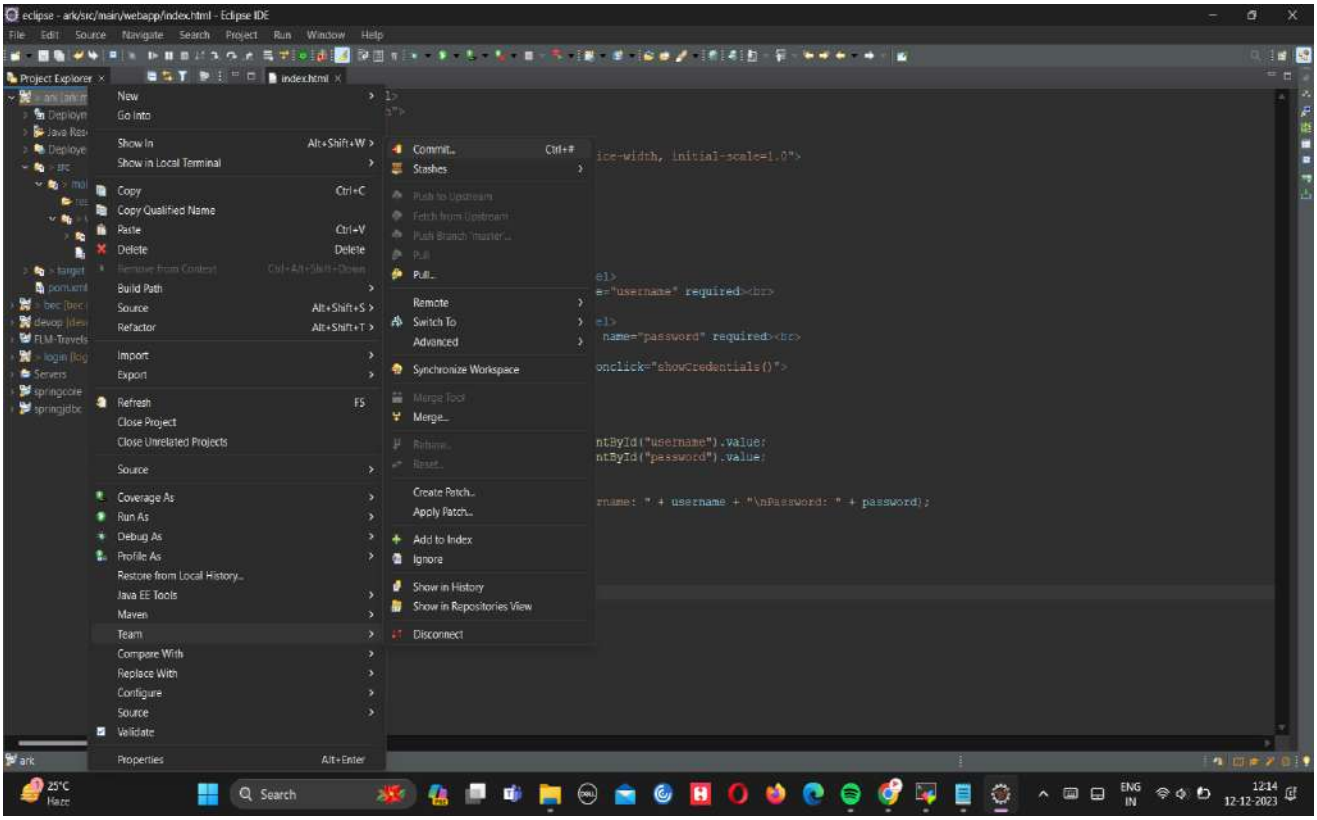
➔ Now it's time to deploy that application into Github.Now again go to project and right click on itwhere you can see option "Teams" and then we will see share project click on it

➔ And then it asks for configure git repository select and click on finish

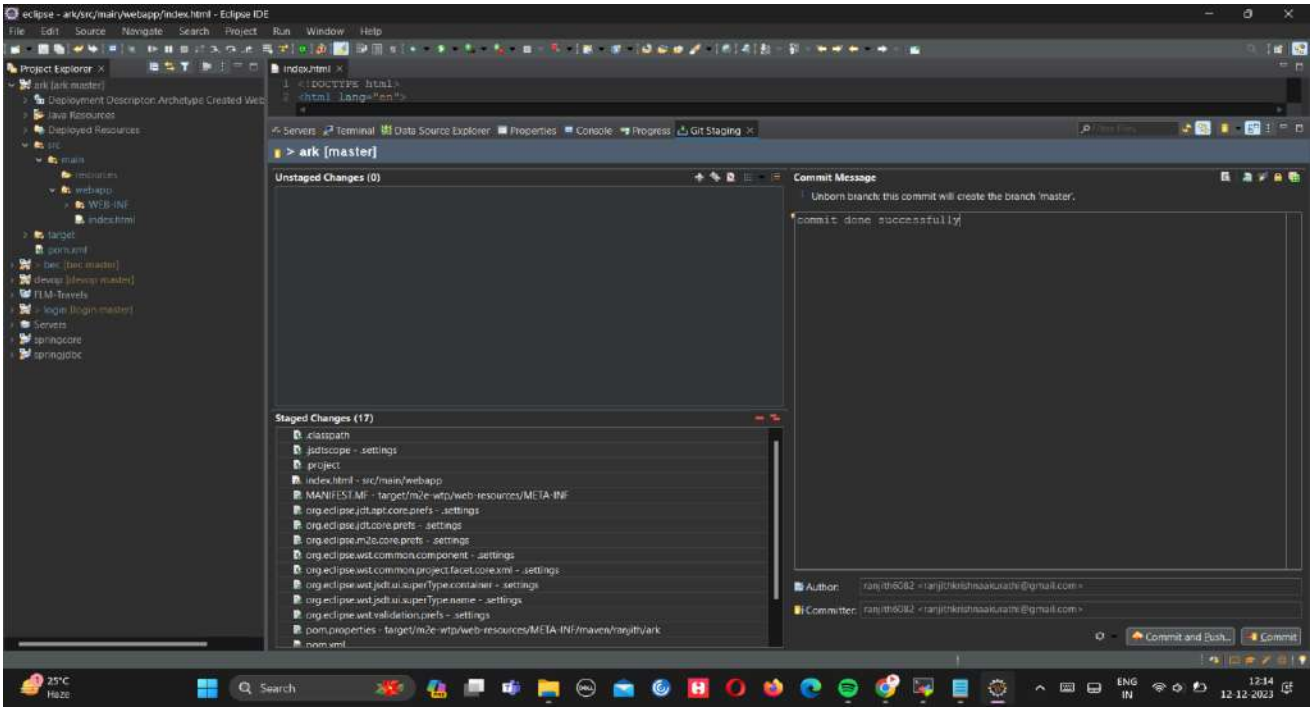




➔Then again right click on project and then teams now we will see commit option there click on it



➔Then in Git staging tab we will see unstaged and staged changes .Now select all unstaged files anddrag it to staged area and type some commit message and click on commit



➔Then click on Push Head where you have to details of Destination Git

Repository LikeRemote name:origin

Location:

URI: url of the github project

Host:host will be the user that is github owner

Repository path:this is repository path of github

Authentication:

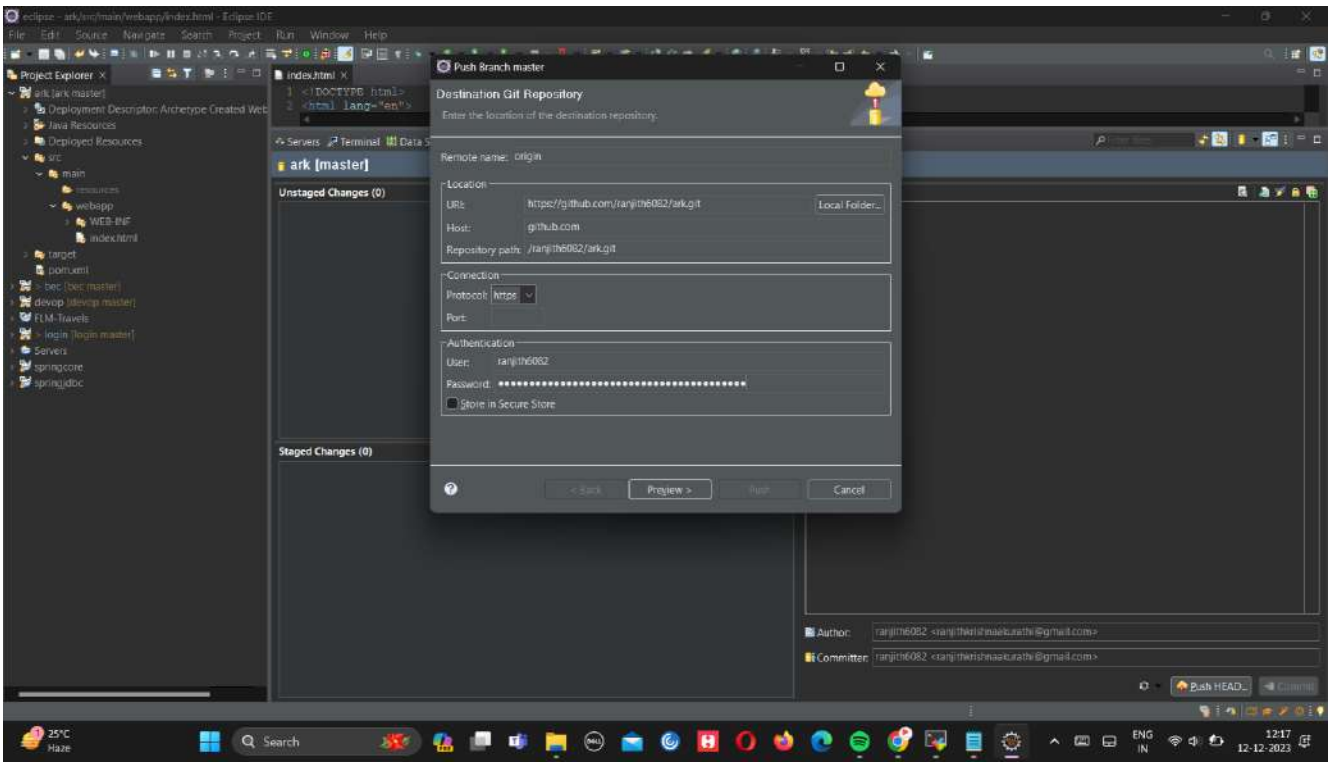
Username: it will be username of your github account we can give it as our github email

Password: this will be a public access token of our github account we can get from following procedure

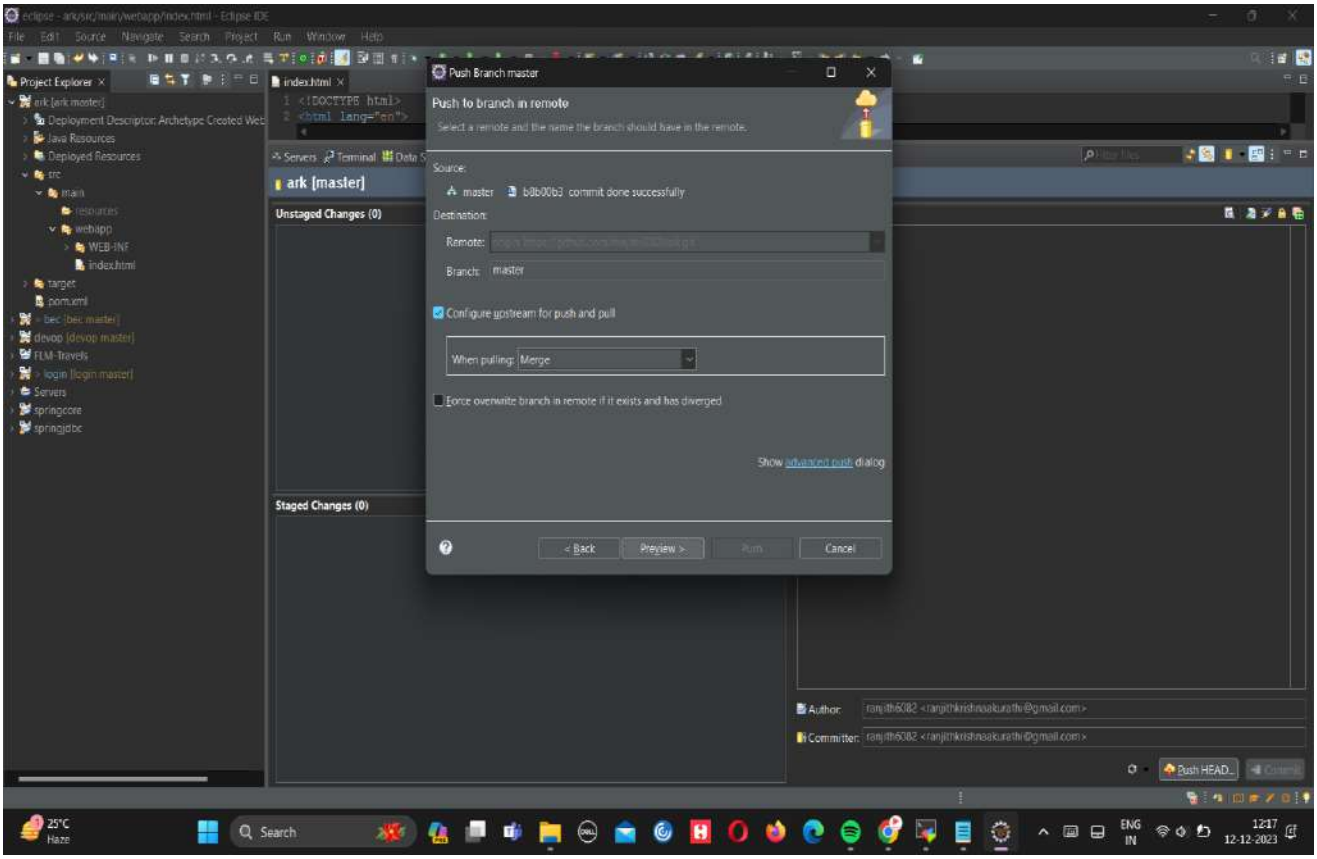
click on settings of your github account then in last we can find developer settings

click on it where we can see public acces token click on classical public access

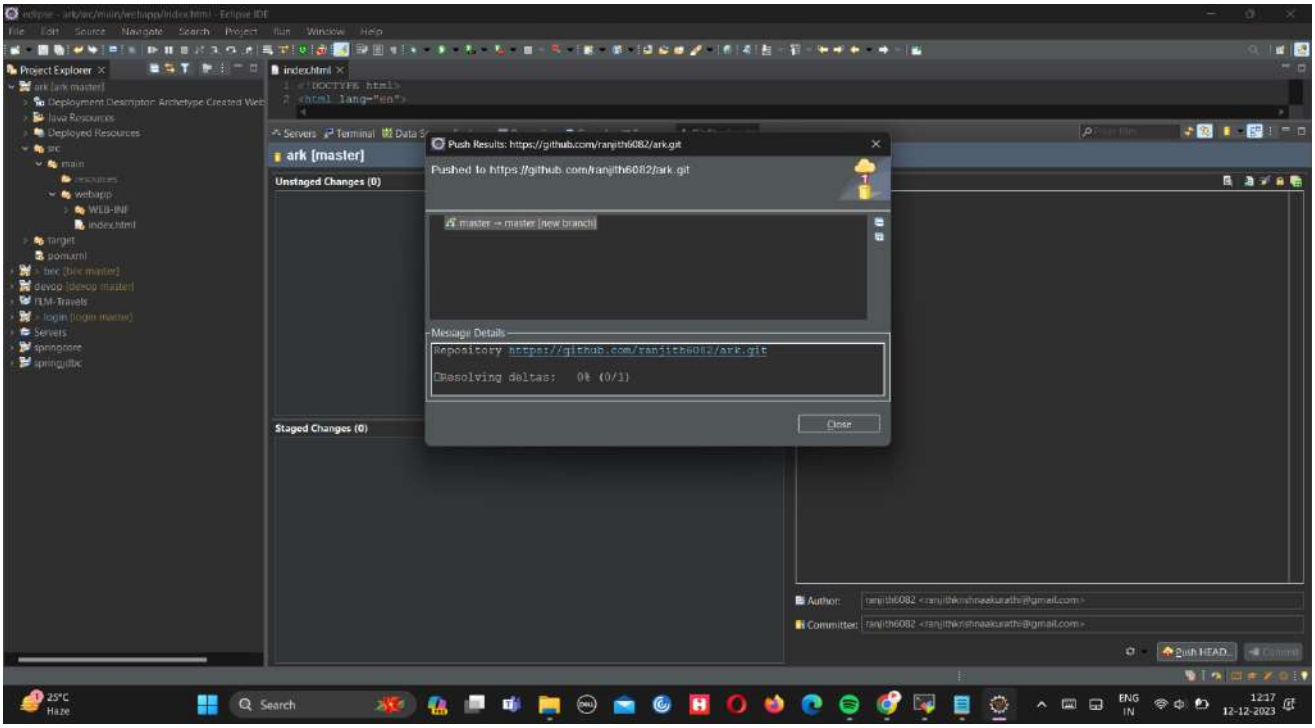
And then click on generate new token and which will act as our public access token to github



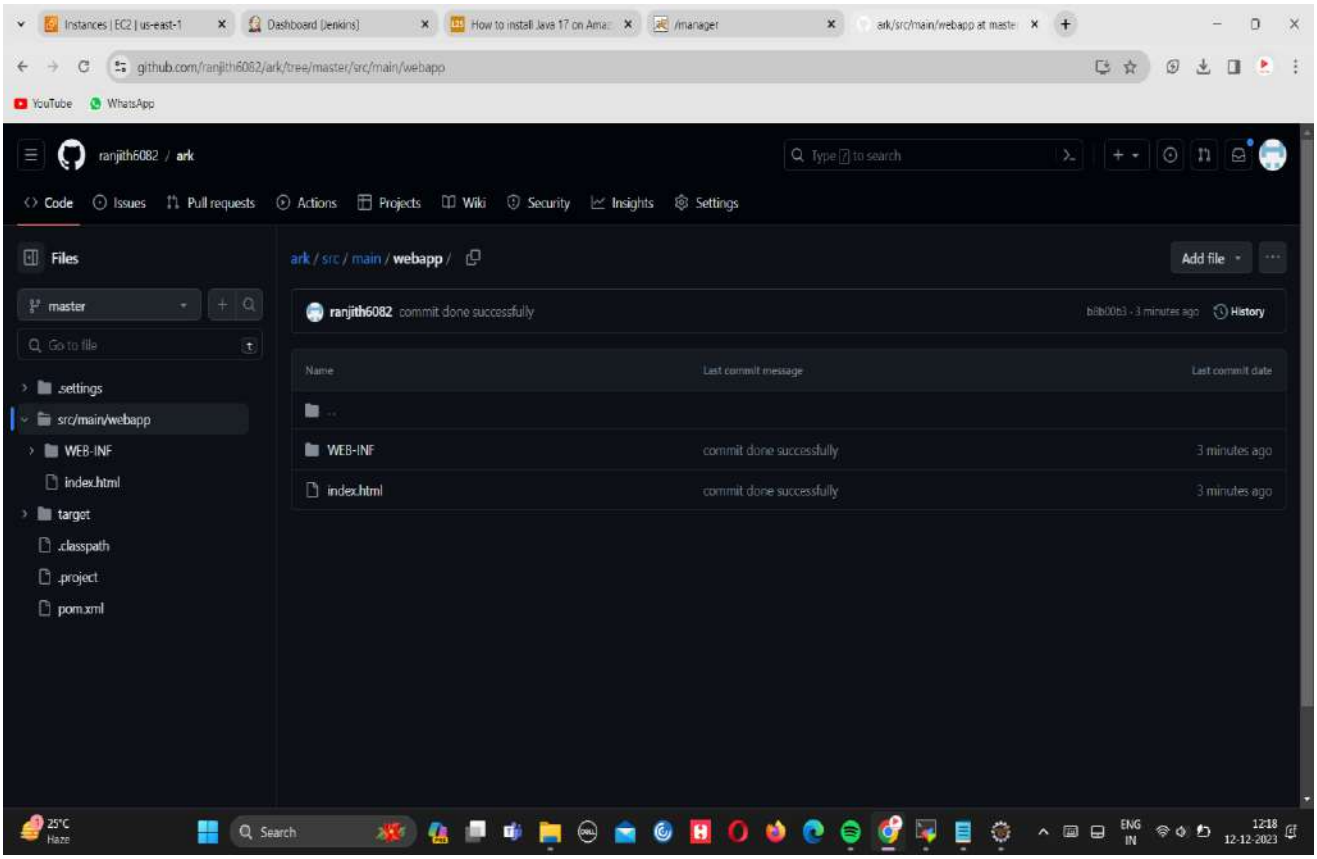
➔Then click on preview and again click on preview then click on push



➔Then again it will asks for credentials to log in fill them and click on log in then it shows pushresults so we can confirm that our project is pushed to github



➔ we can confirm it by visiting our github repository we can deployed project files there.



Experiment:4

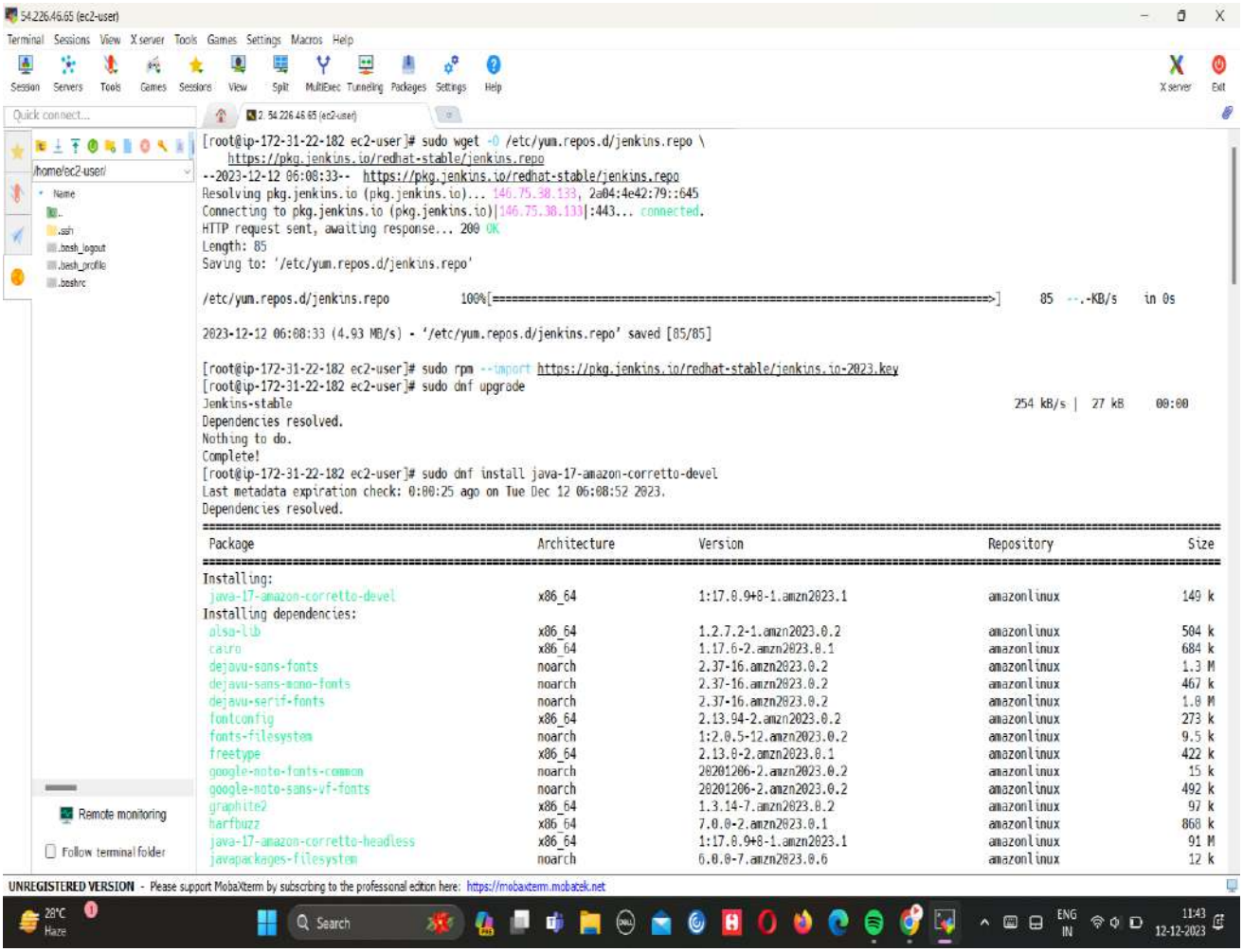
4. Demonstrate CI job to build maven application using Jenkins.

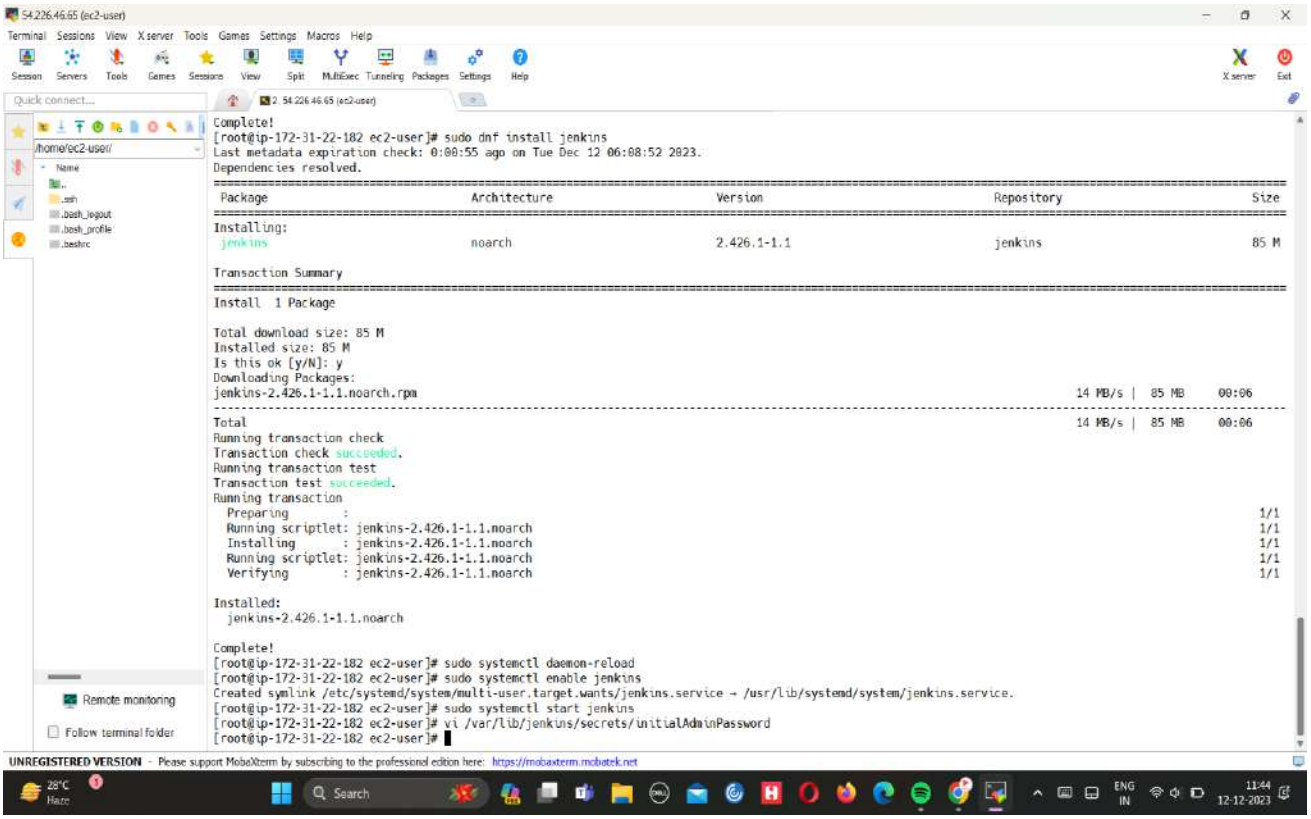
Procedure:

Jenkins Installation

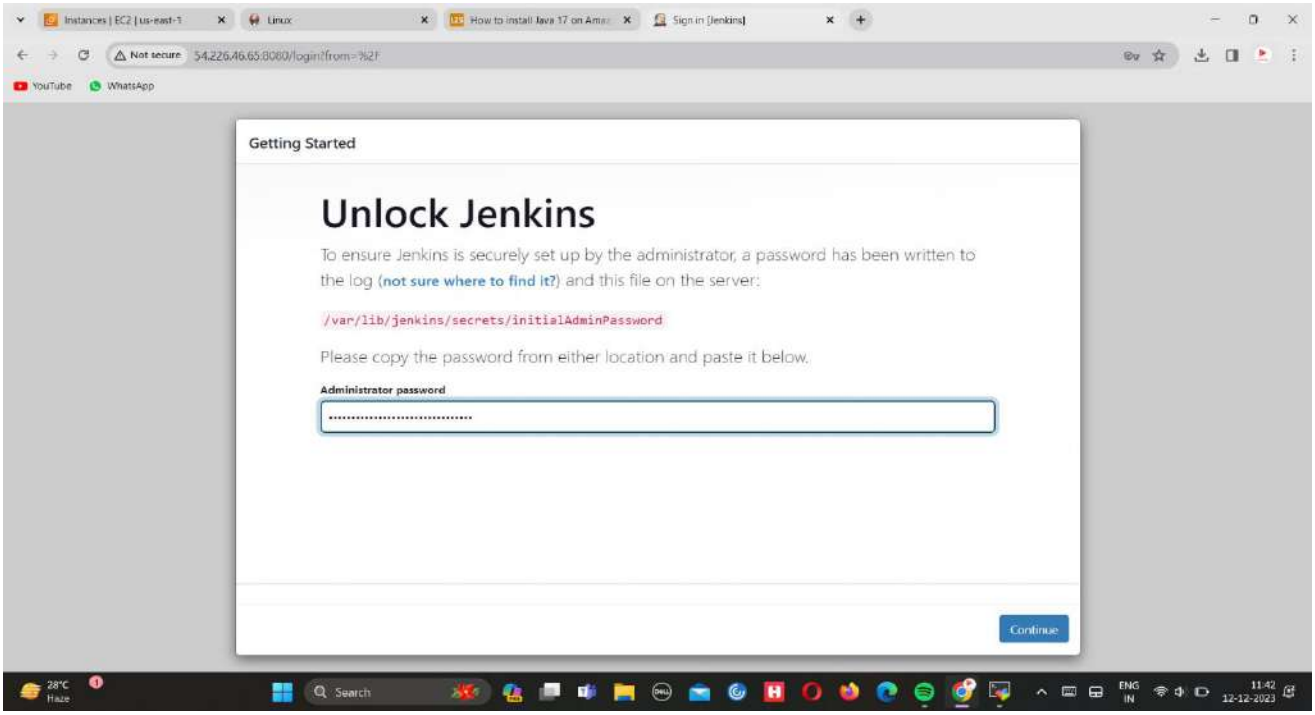
➔ Open the browser type jenkins for ec2 linux instance

➔ Goto Installing Jenkins -> Linux -> Fedora copy the links and paste in mobaxterm.

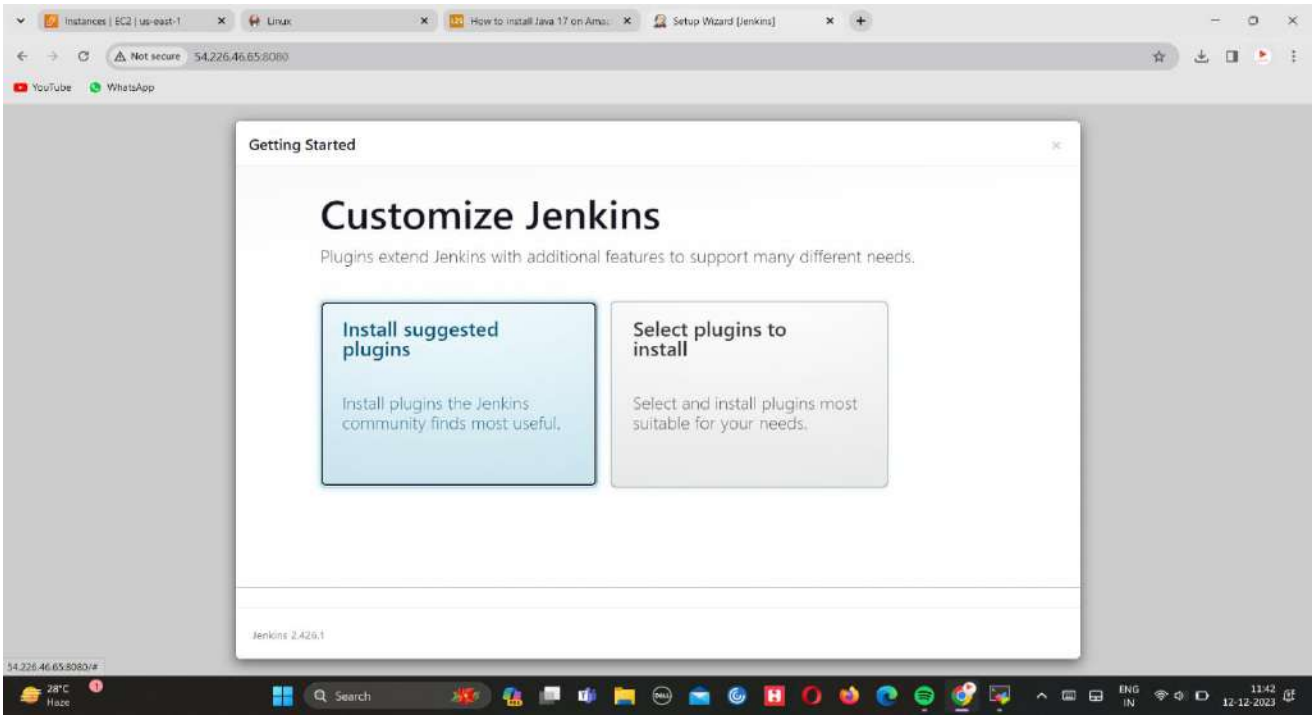




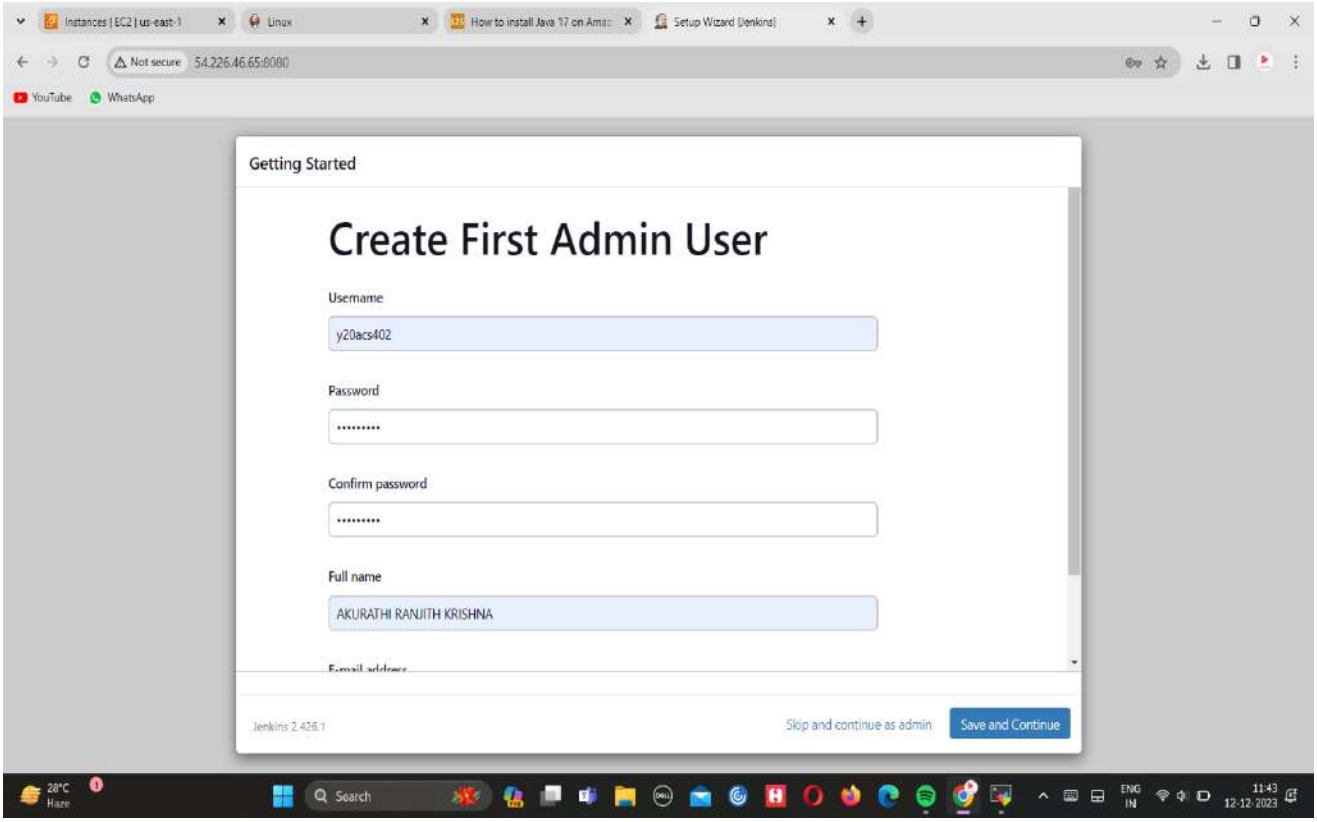
➔ copy the link and open link using vi command, it contain password copy that password and paste it below.



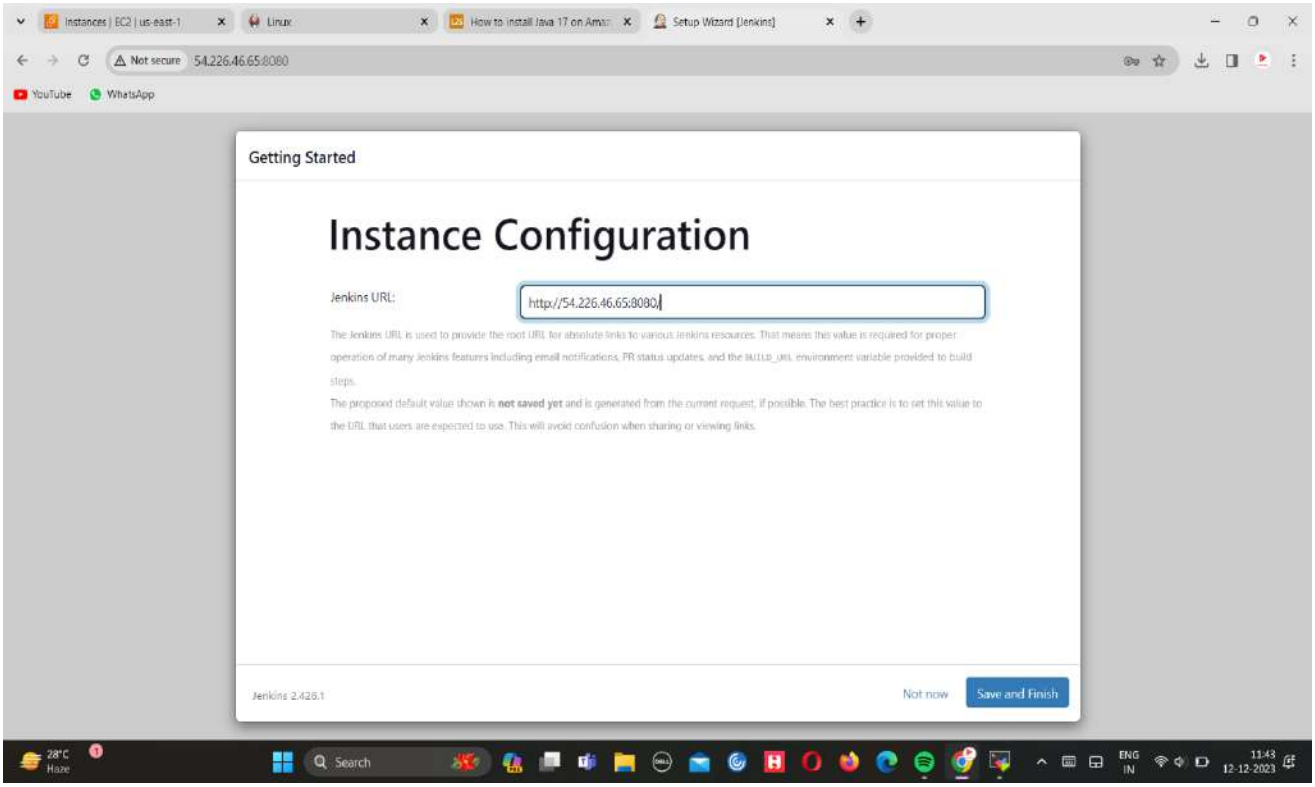
➔ we need to select install suggested plugins



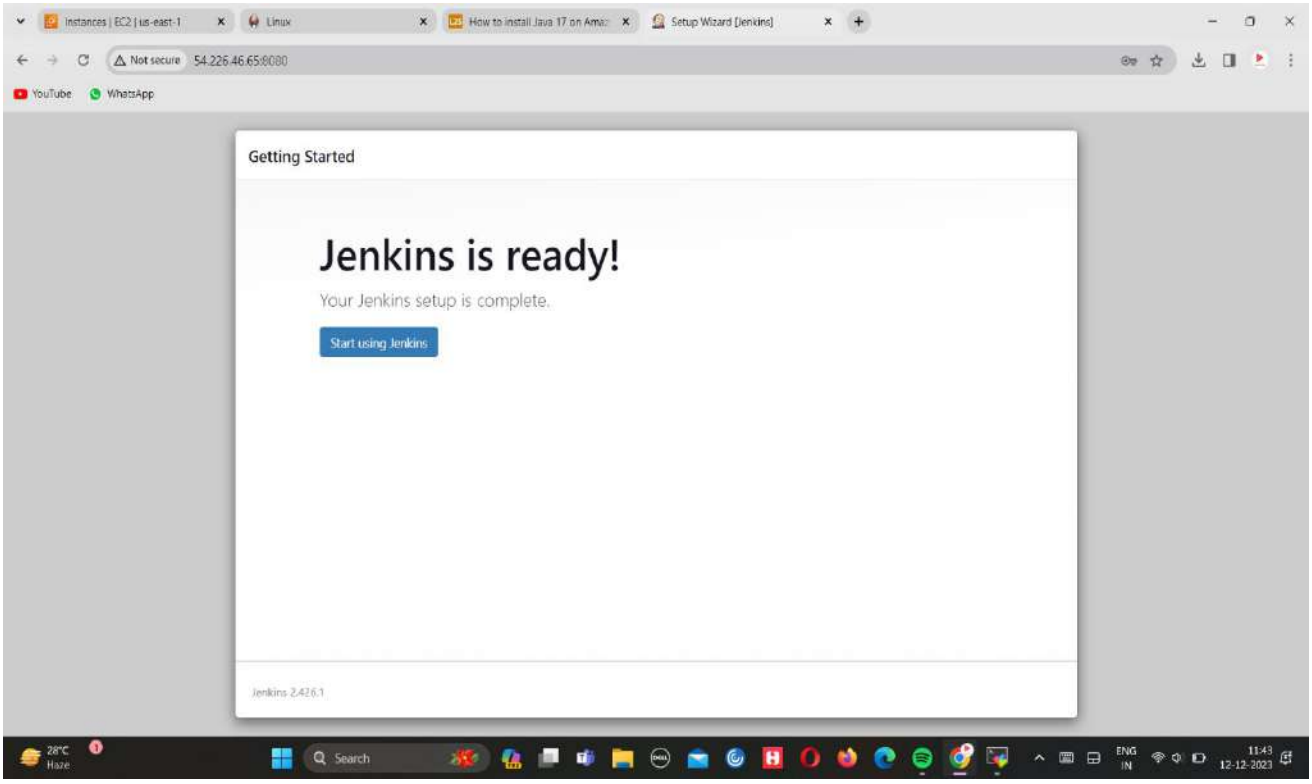
➔ It will open a registration page. We need to fill it with your details.



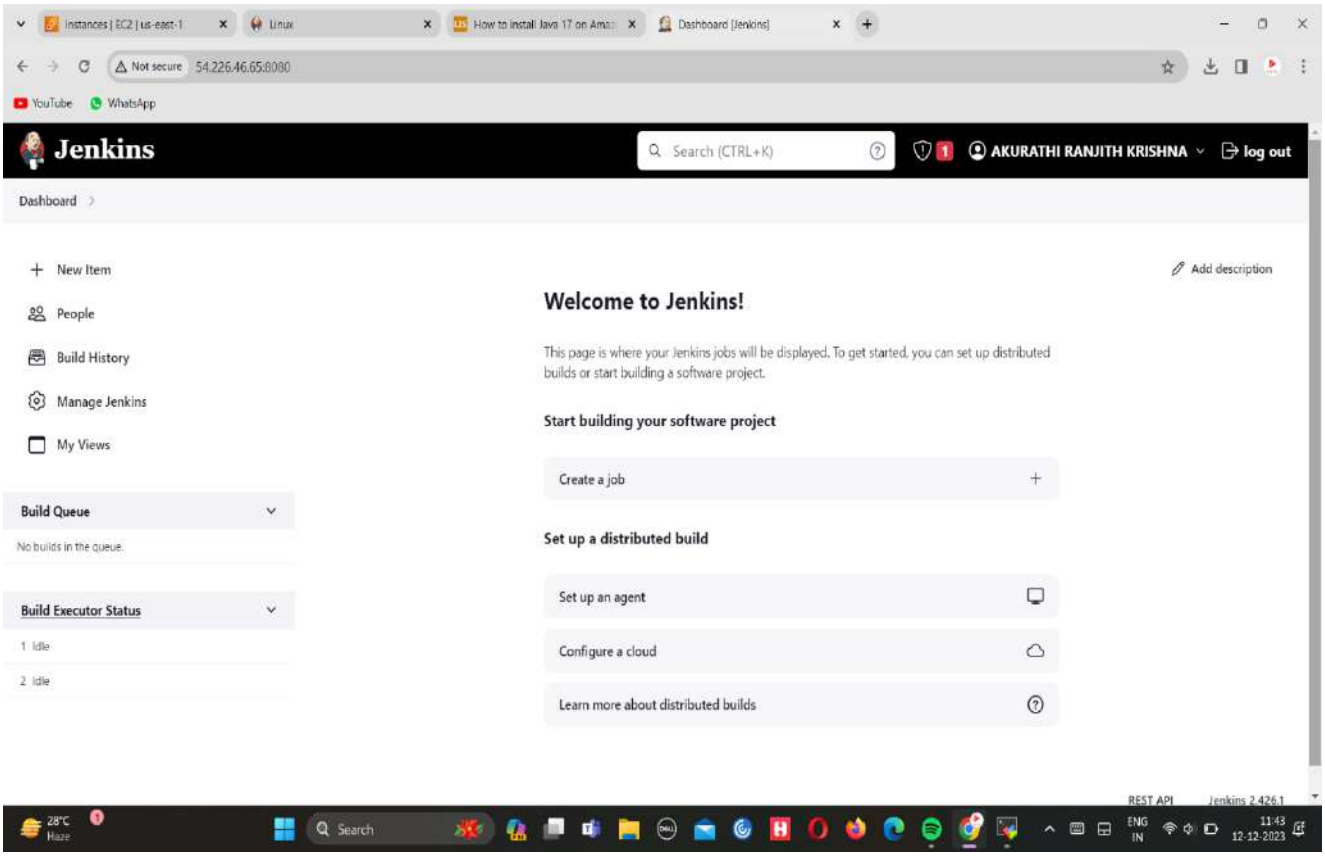
➔ It will show the url of the jenkins



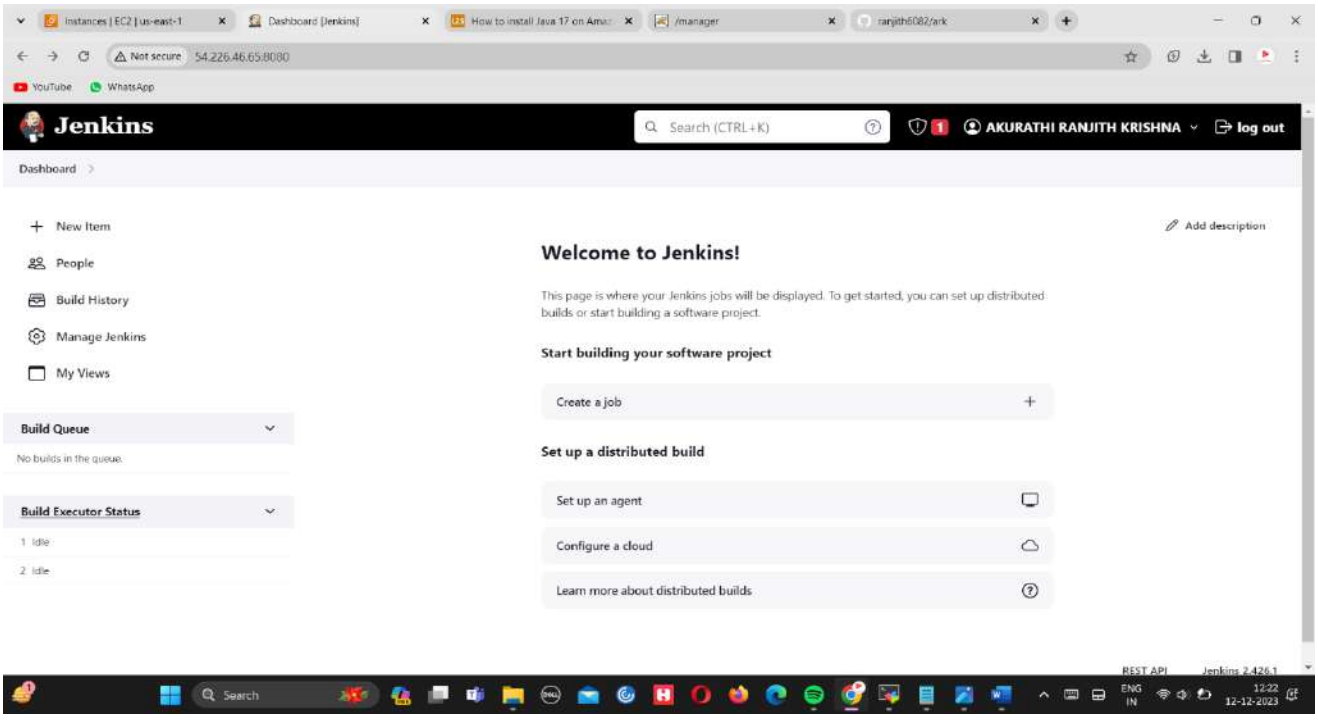
➔ Now the Jenkins is successfully installed. Click on start using Jenkins.



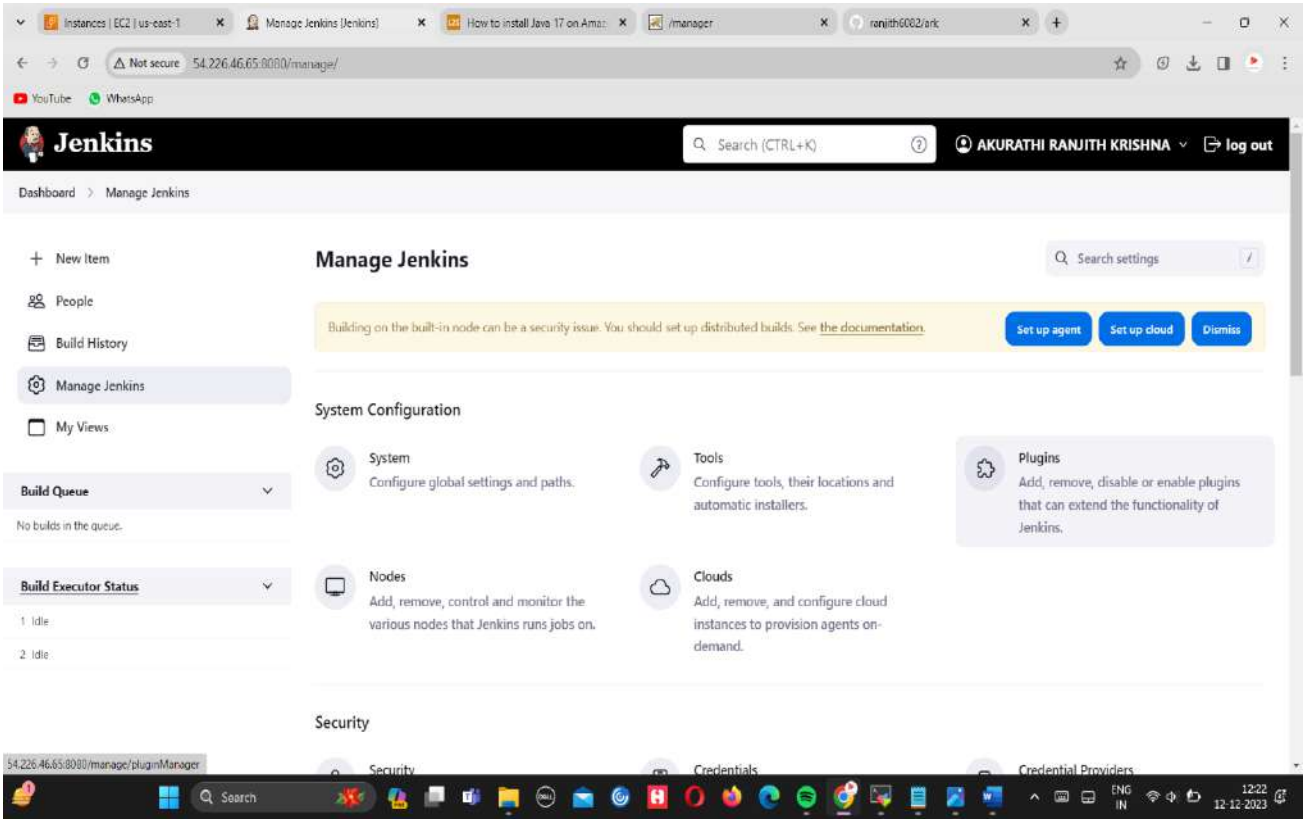
➔ After login success, the interface of the Jenkins look like as shown in below.



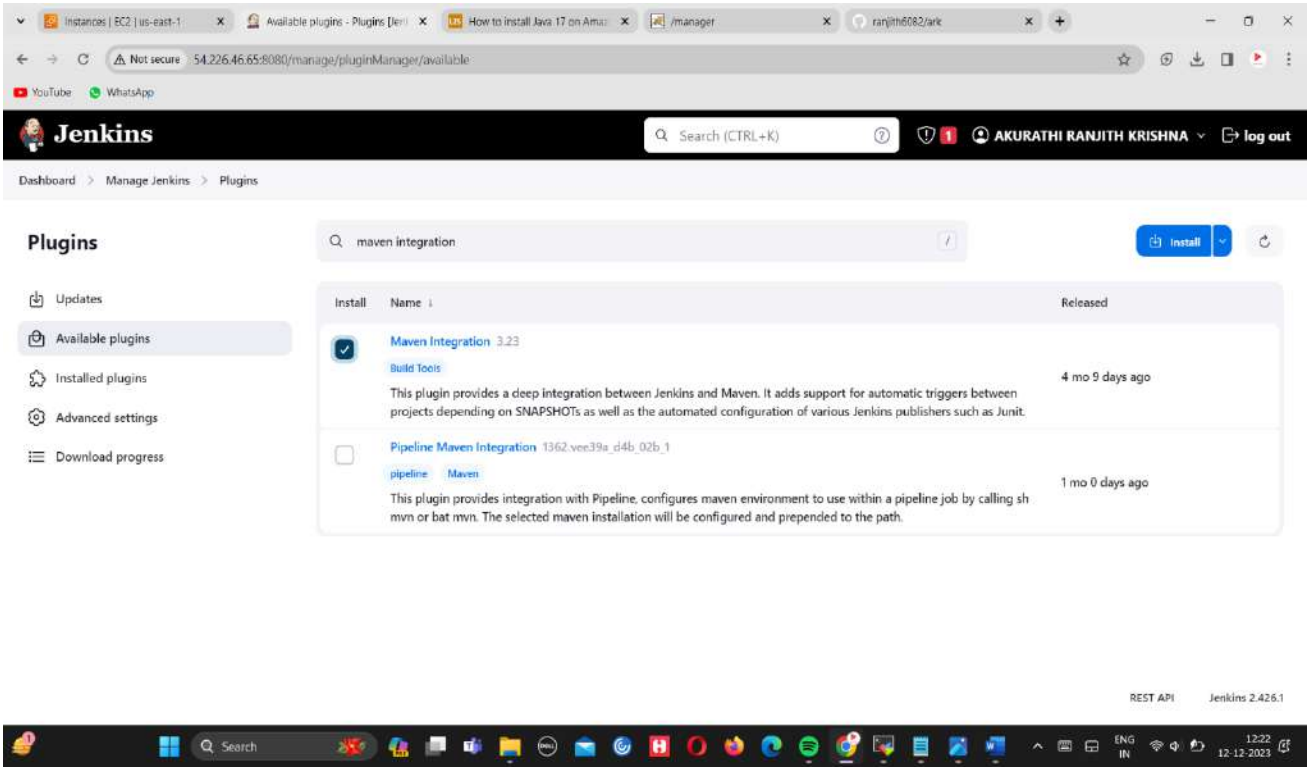
➔ Login into Jenkins and select manage jenkins



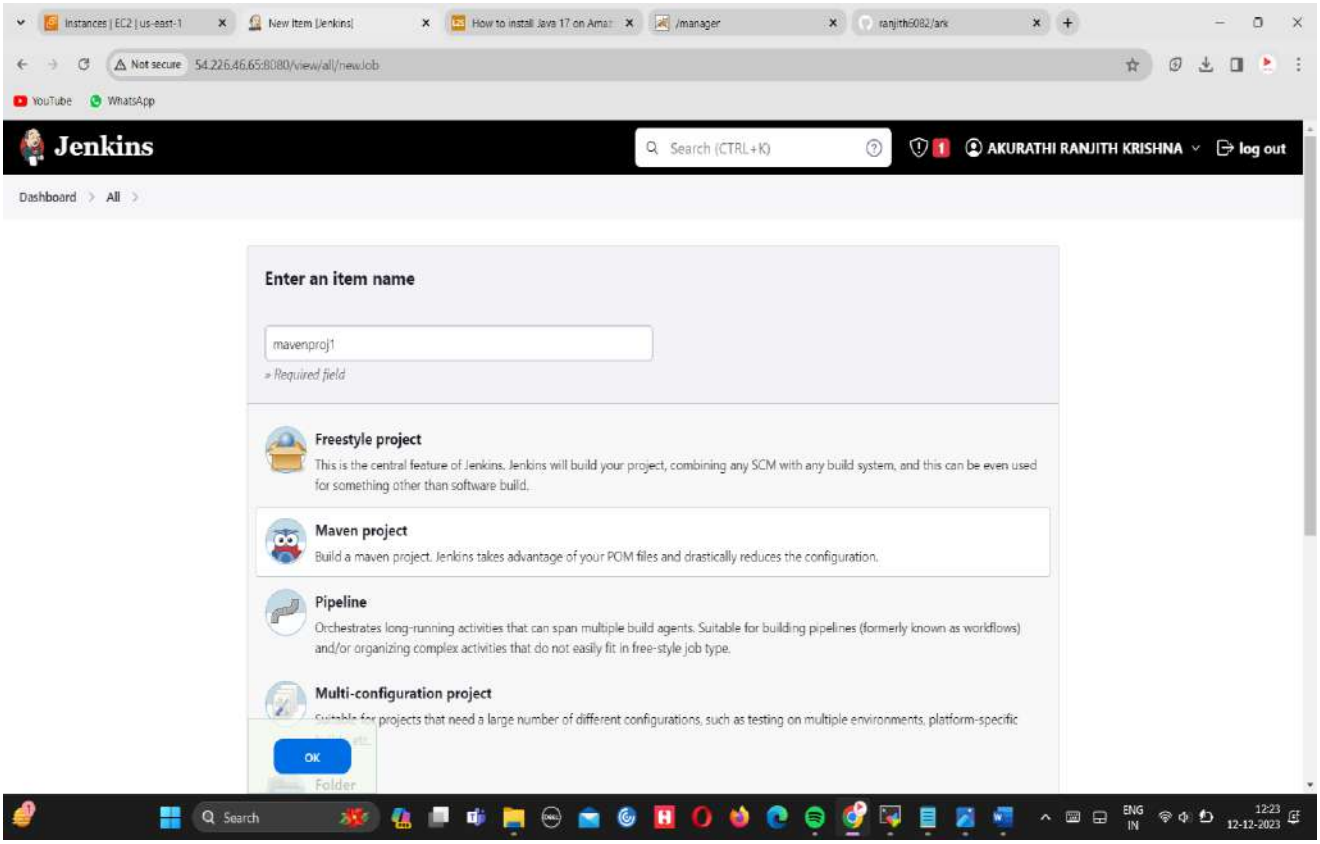
➔ We need to click on plugin



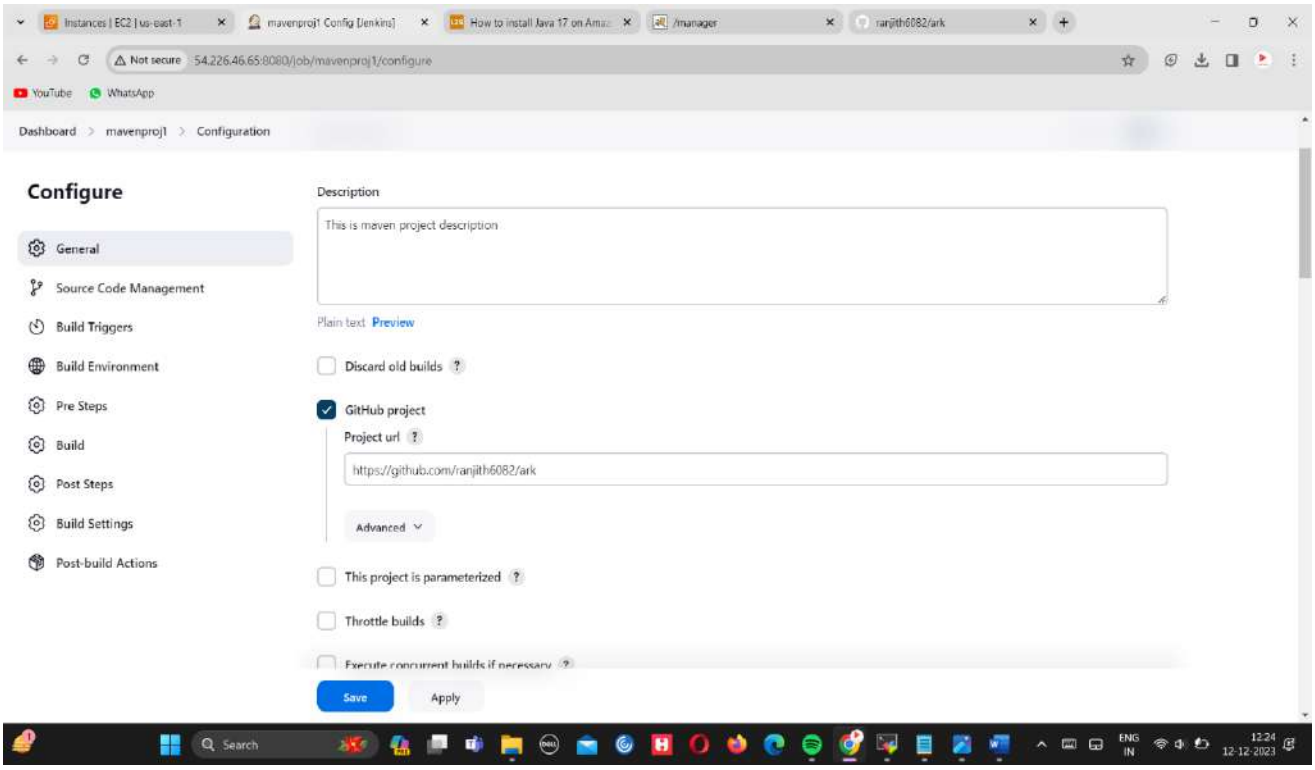
➔ click on available plugins, select maven integration plugin and install that plugin.



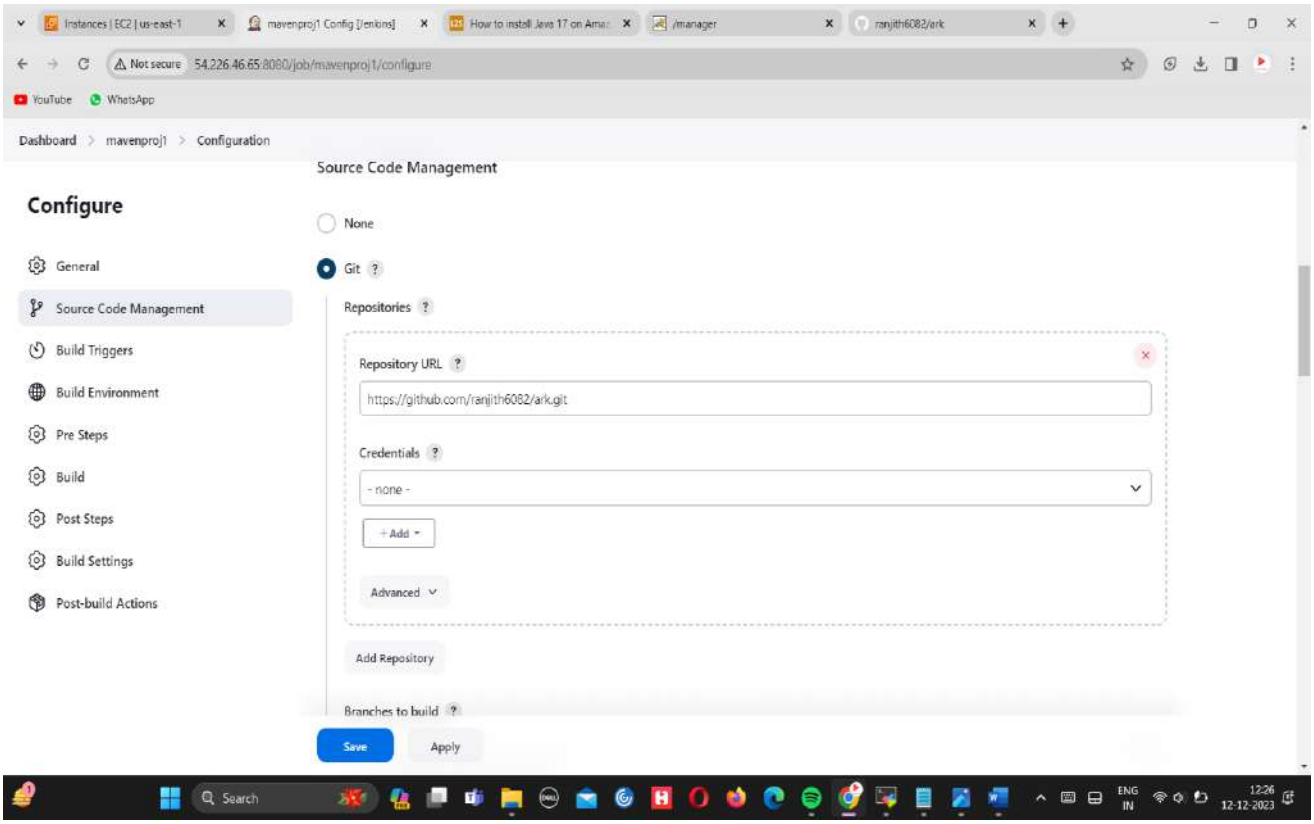
➔ selcct a new item, enter item name and selcct on maven project.



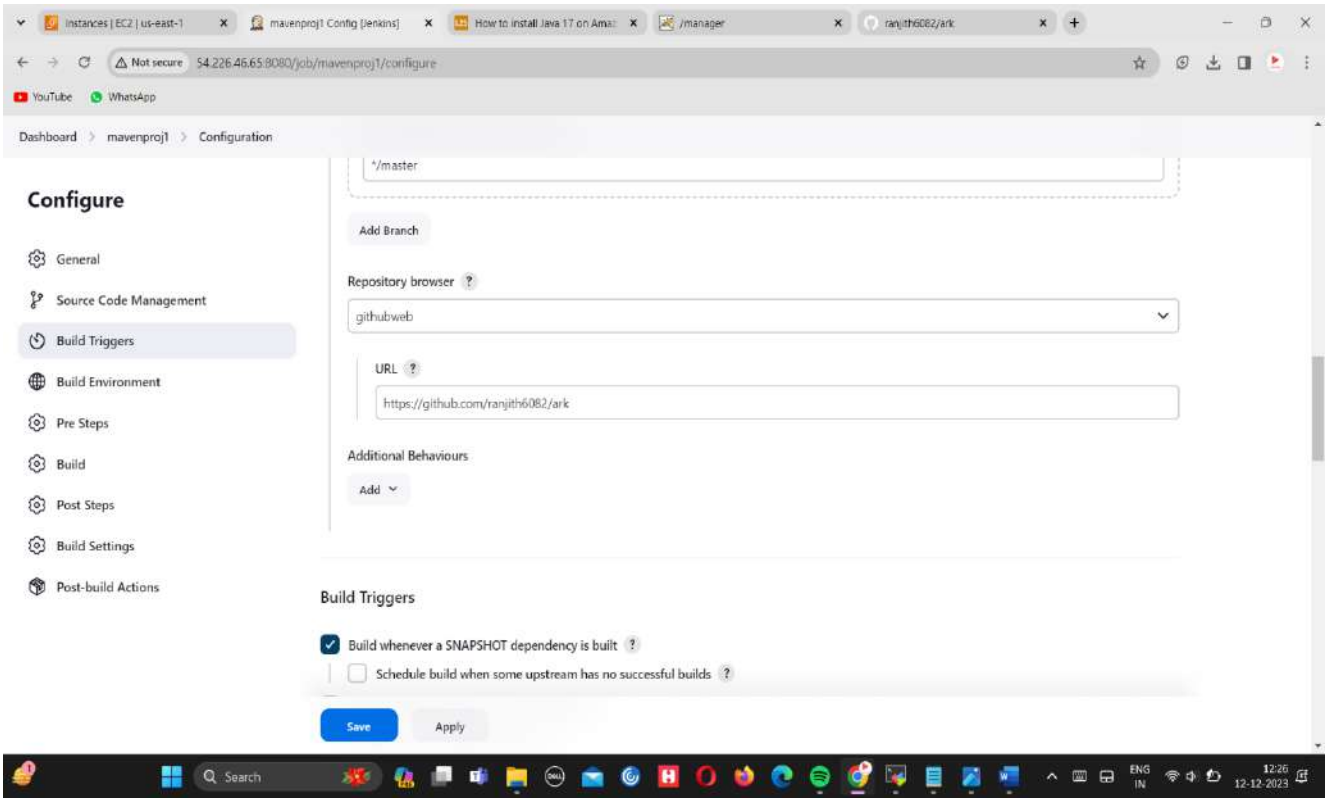
➔ write the description of an item and selcct on github project add git url.



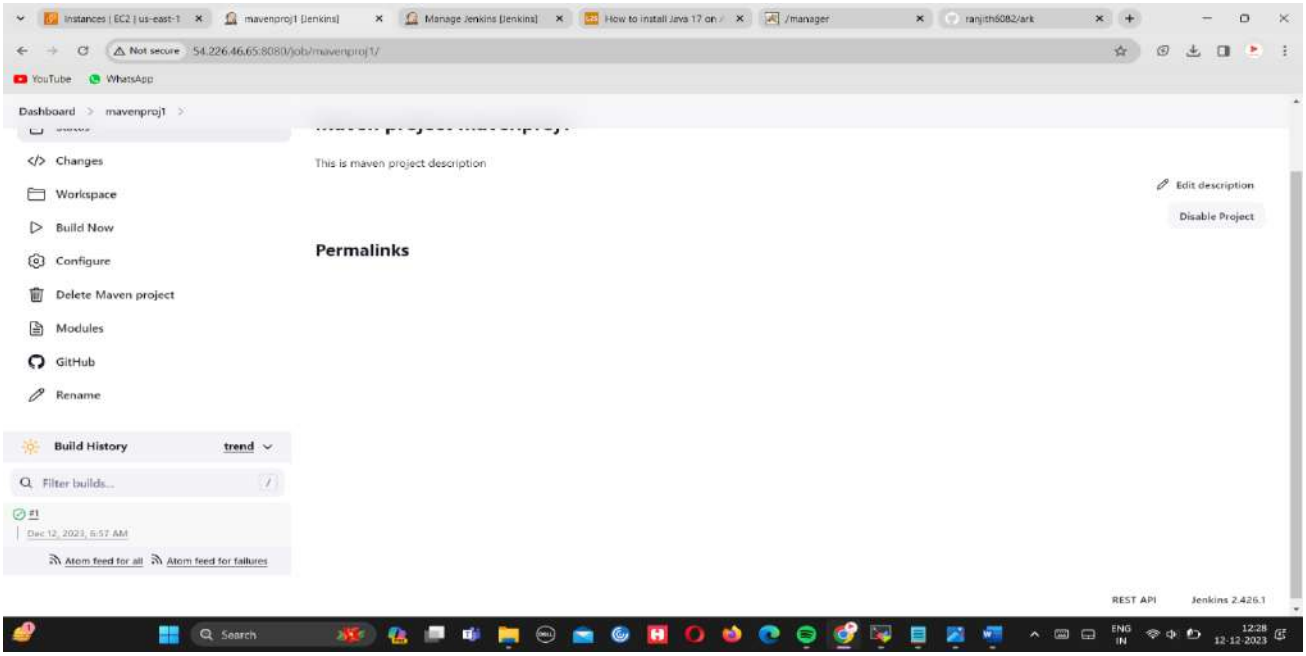
➔ In source code management select git and add a repository url.



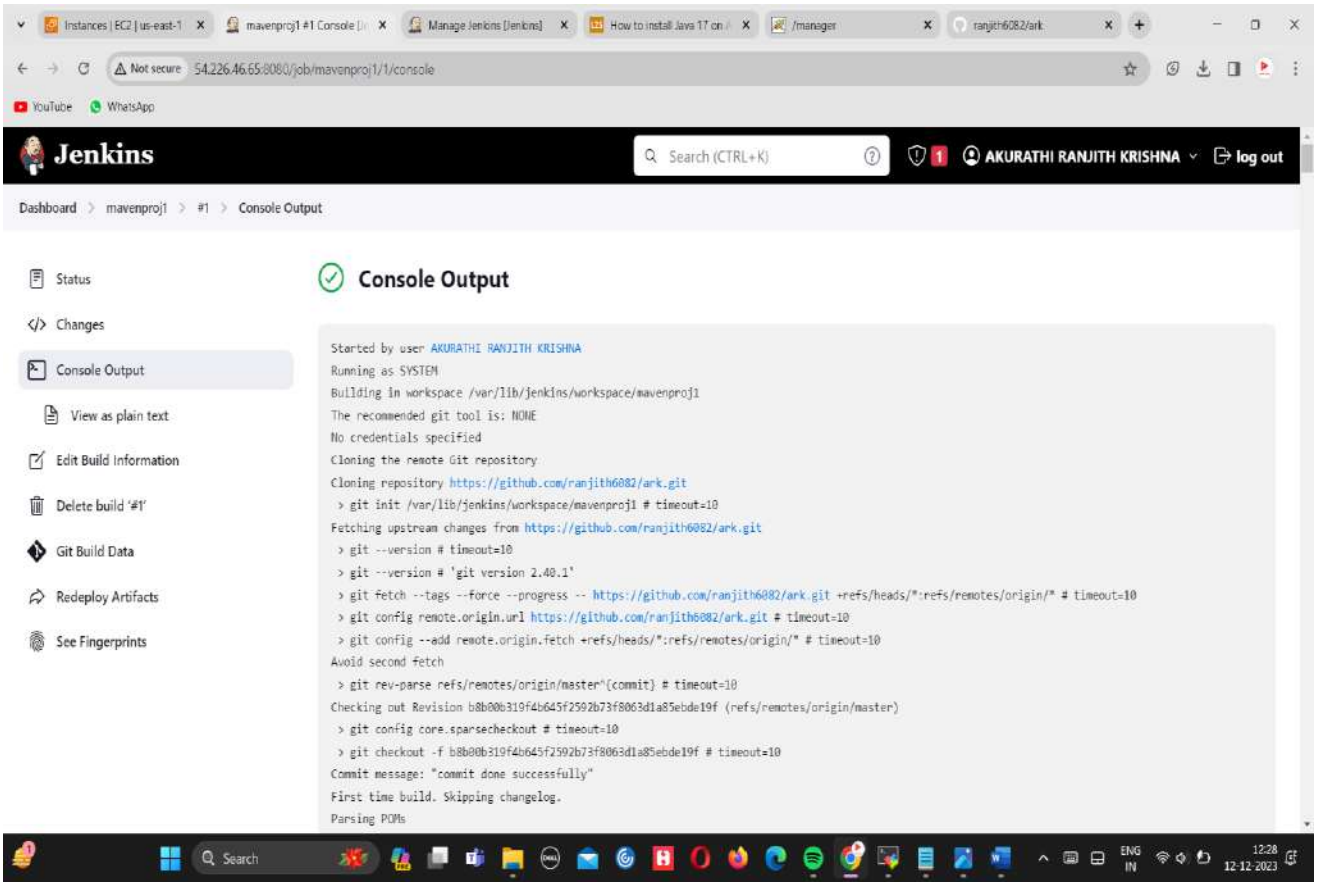
➔ Select githubweb from dropdownlist enter url and click on apply and save button..



➔ we need to select build now option, if we get green symbol then our build will be done successfully.



➔ Now we can check the console output, our build will be done successfully.

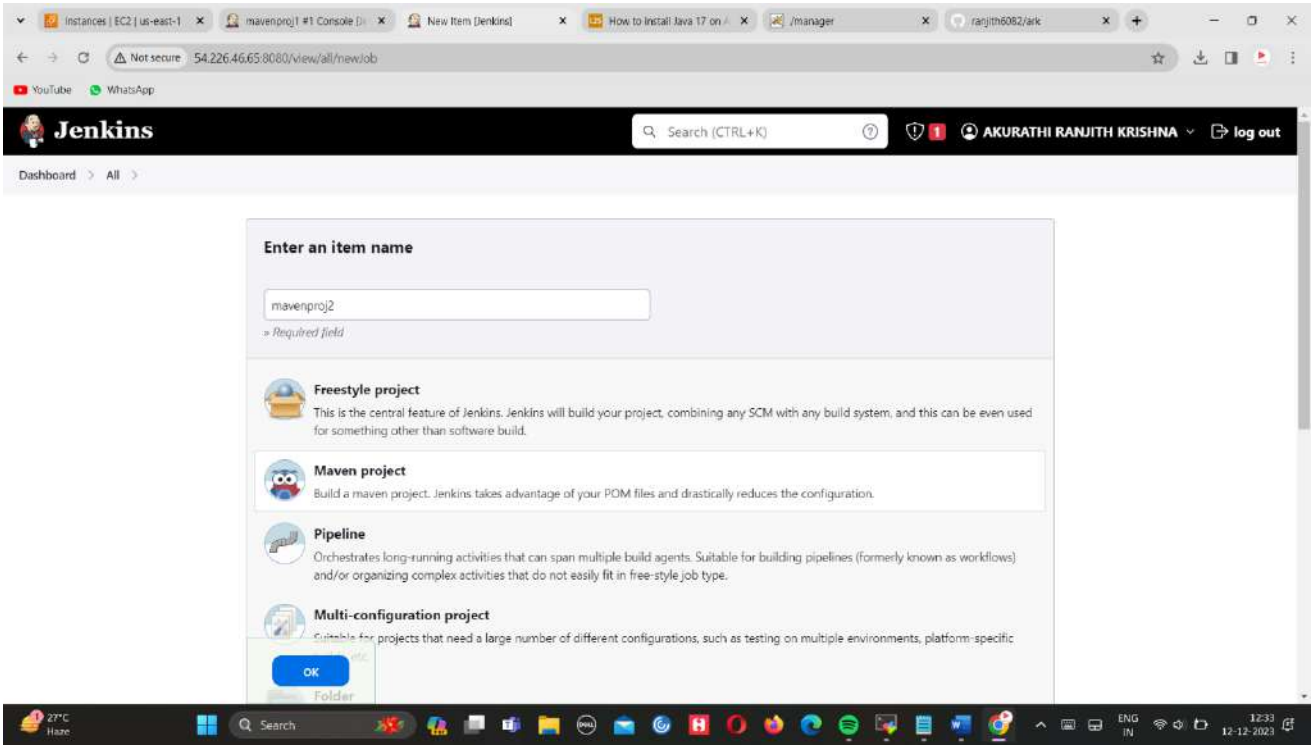

Jenkins
Search (CTRL+K)
AKURATHI RANJITH KRISHNA
log out
Dashboard > mavenproj1 > #1 > Console Output
Status
Changes
Console Output
View as plain text
Edit Build Information
Delete build '#1'
Git Build Data
Redeploy Artifacts
See Fingerprints
Console Output
Started by user AKURATHI RANJITH KRISHNA
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/mavenproj1
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/ranjith6082/ark.git
> git init /var/lib/jenkins/workspace/mavenproj1 # timeout=10
Fetching upstream changes from https://github.com/ranjith6082/ark.git
> git --version # timeout=10
> git --version # 'git version 2.40.1'
> git fetch --tags --force --progress -- https://github.com/ranjith6082/ark.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/ranjith6082/ark.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/master^{commit} # timeout=10
Checking out Revision b8b00b319f4b645f2592b73f8063d1a85ebde19f (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f b8b00b319f4b645f2592b73f8063d1a85ebde19f # timeout=10
Commit message: "commit done successfully"
First time build. Skipping changelog.
Parsing POMs

Experiment:5

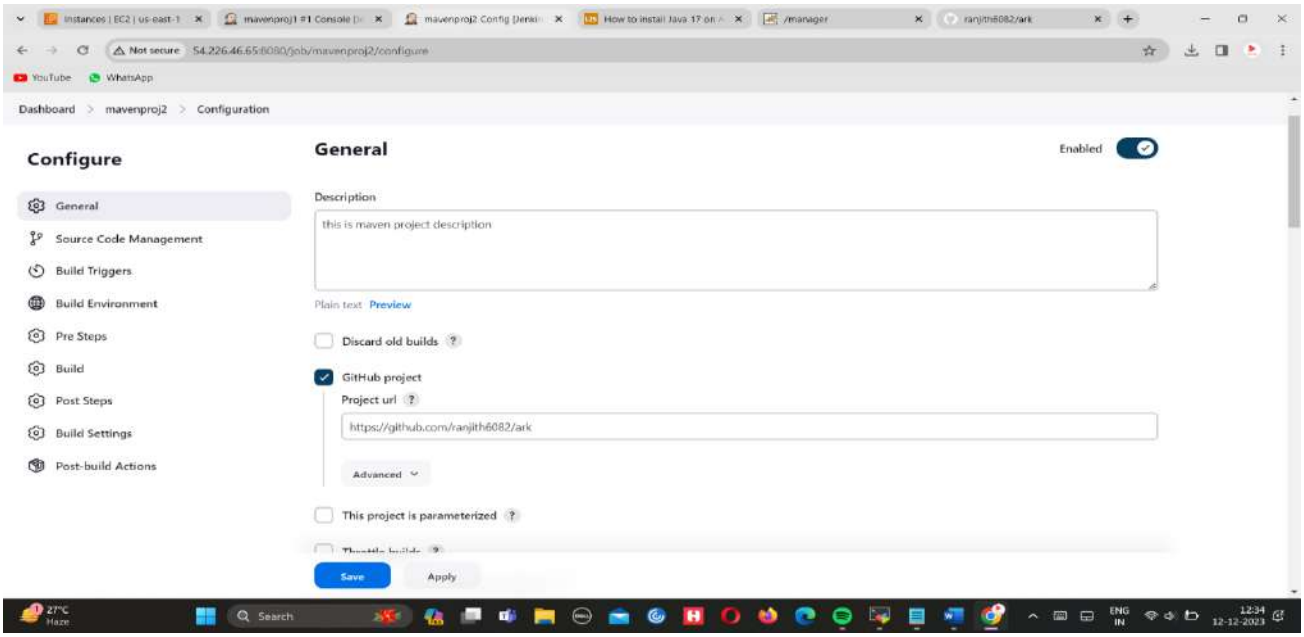
5. Demonstrate CI/CD job to build maven application and deploy it on tomcat server using Jenkins.

Procedure:

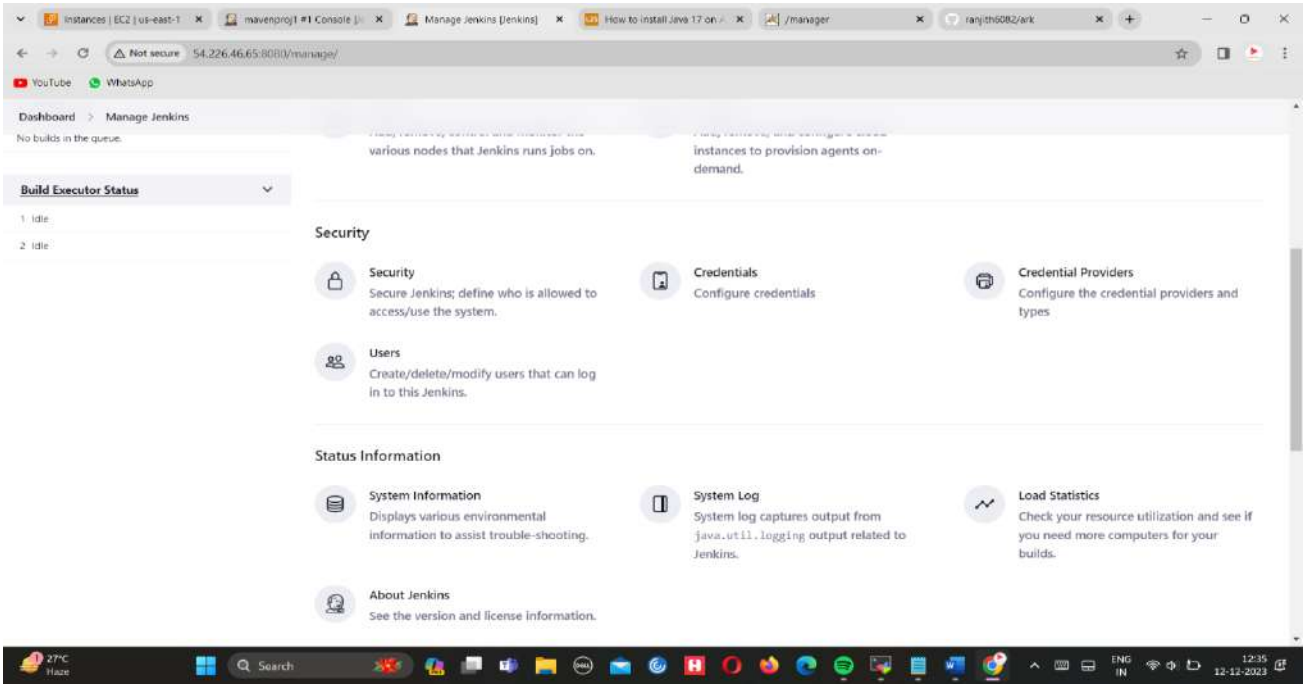
➔ Open Jenkins and select new item



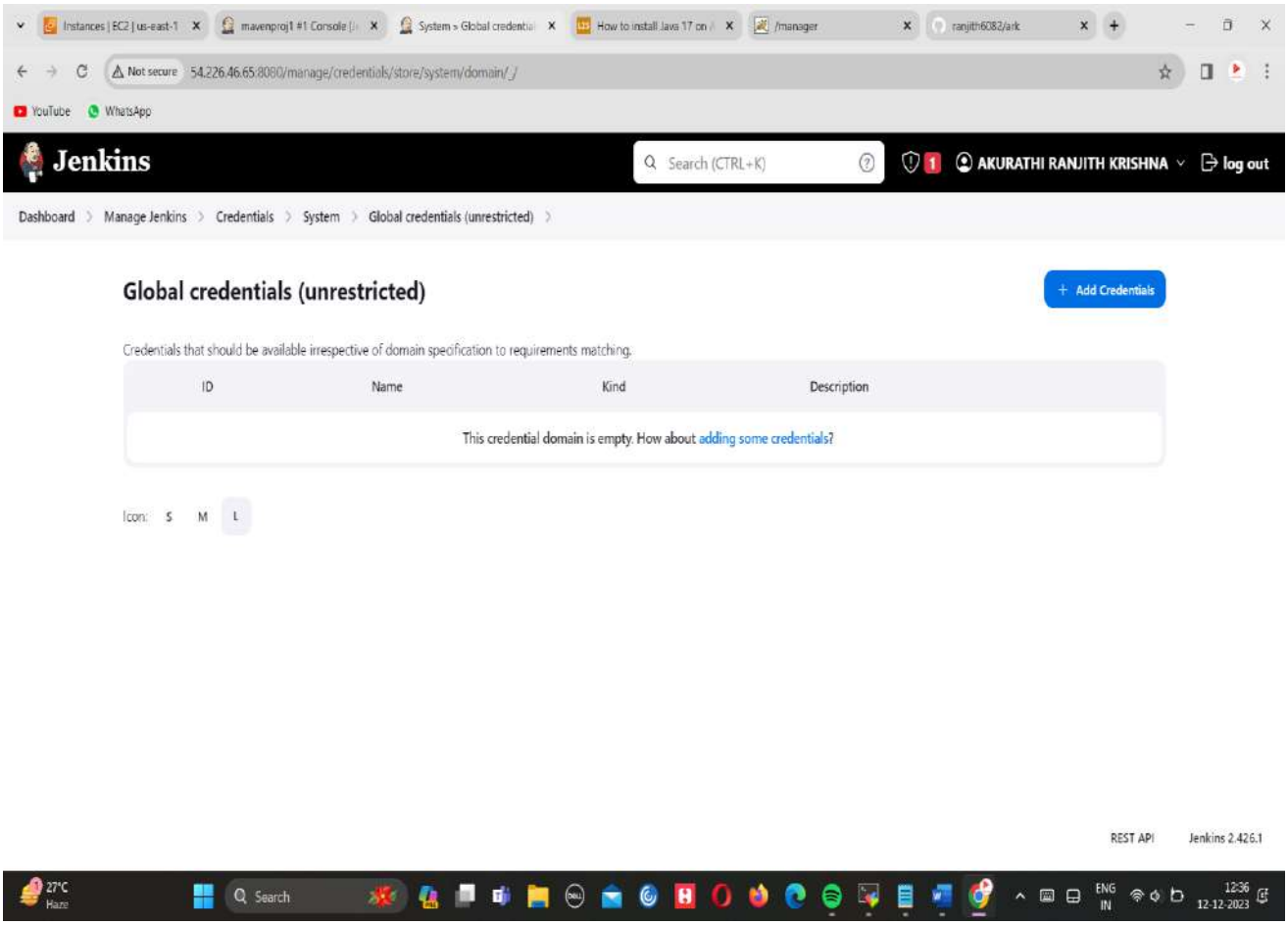
➔ We need to write the description of item and give the project url



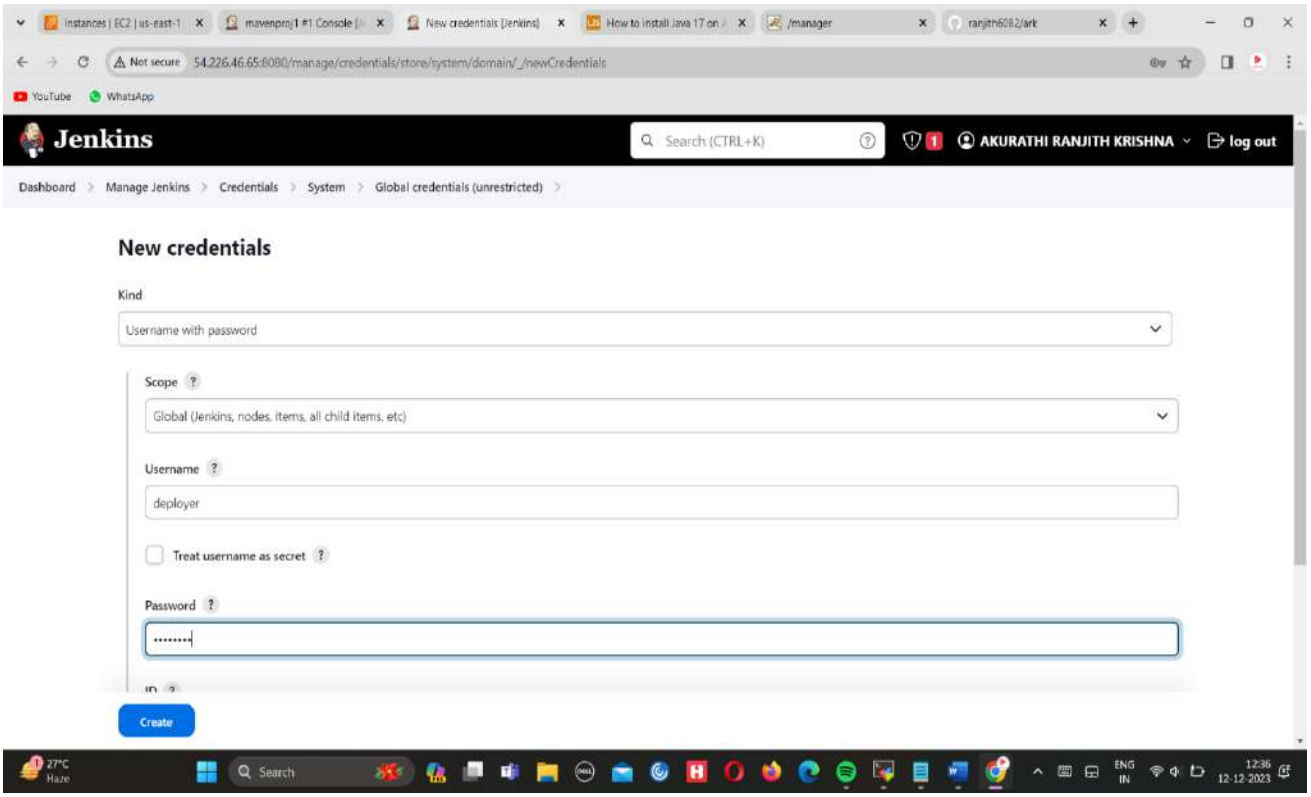
➔ Go to the dashboard select manage jenkins



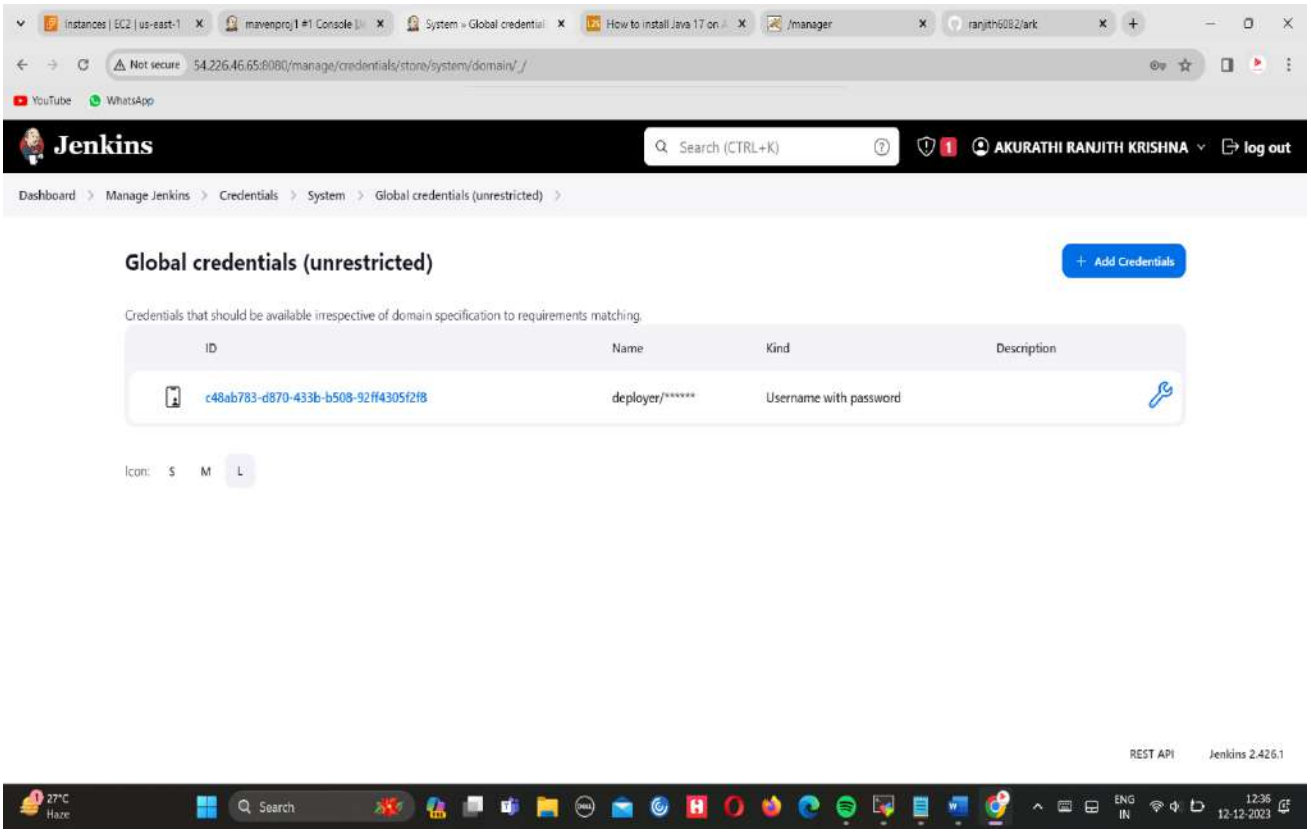
➔ We need to select global credentials and add credentials



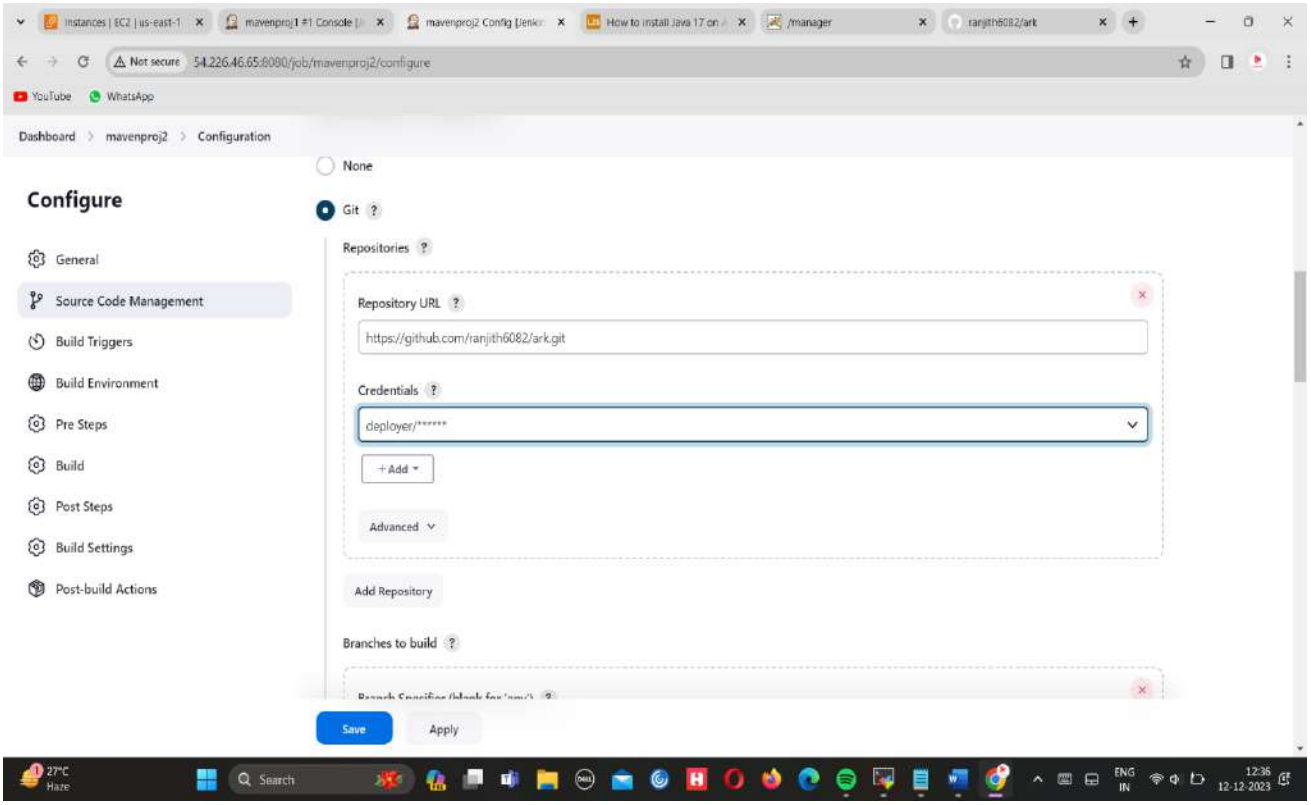
➔ Enter username as “deployer” and password as “deployer” and click on create



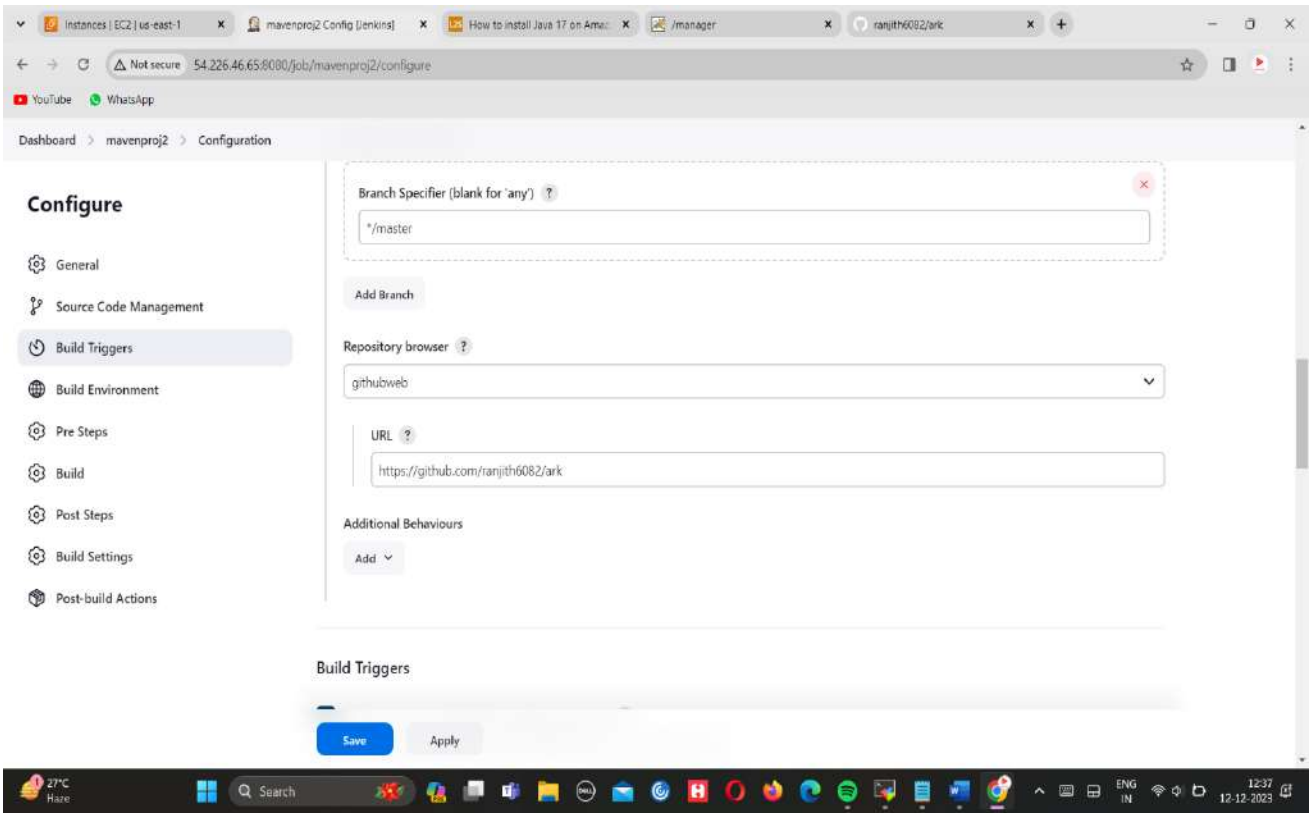
➔ Now the credentials are added successfully



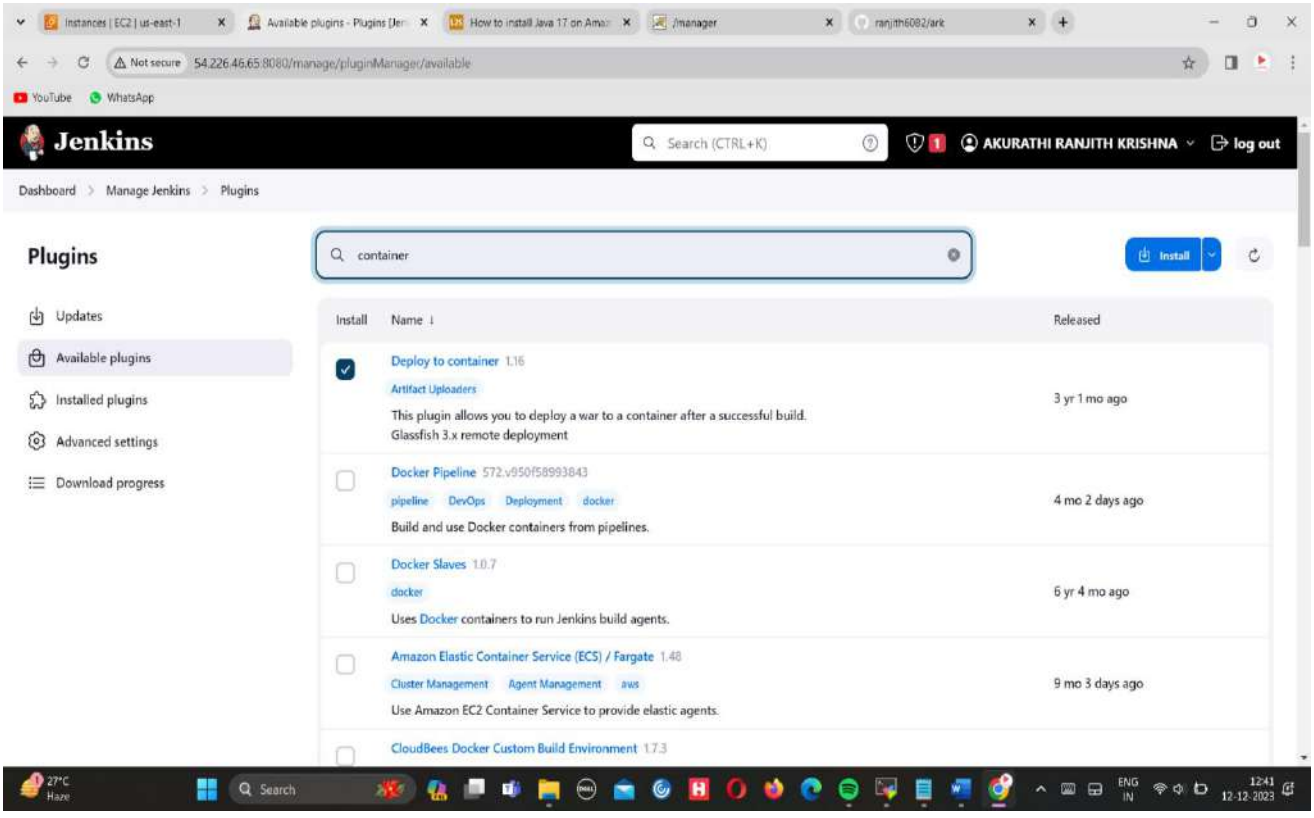
➔ Open the configuration file and give the credentials which is given in global credentials



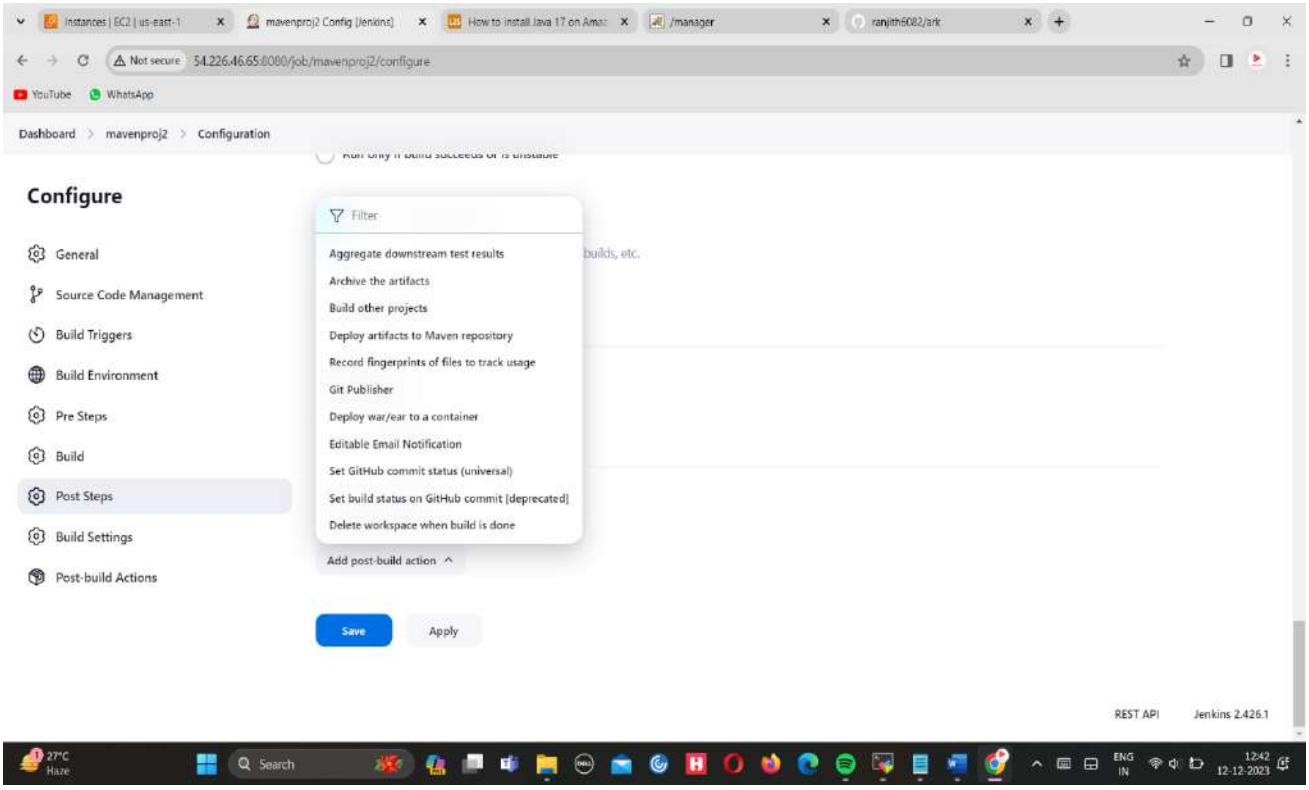
➔ Select githubweb from dropdown list and add url to it



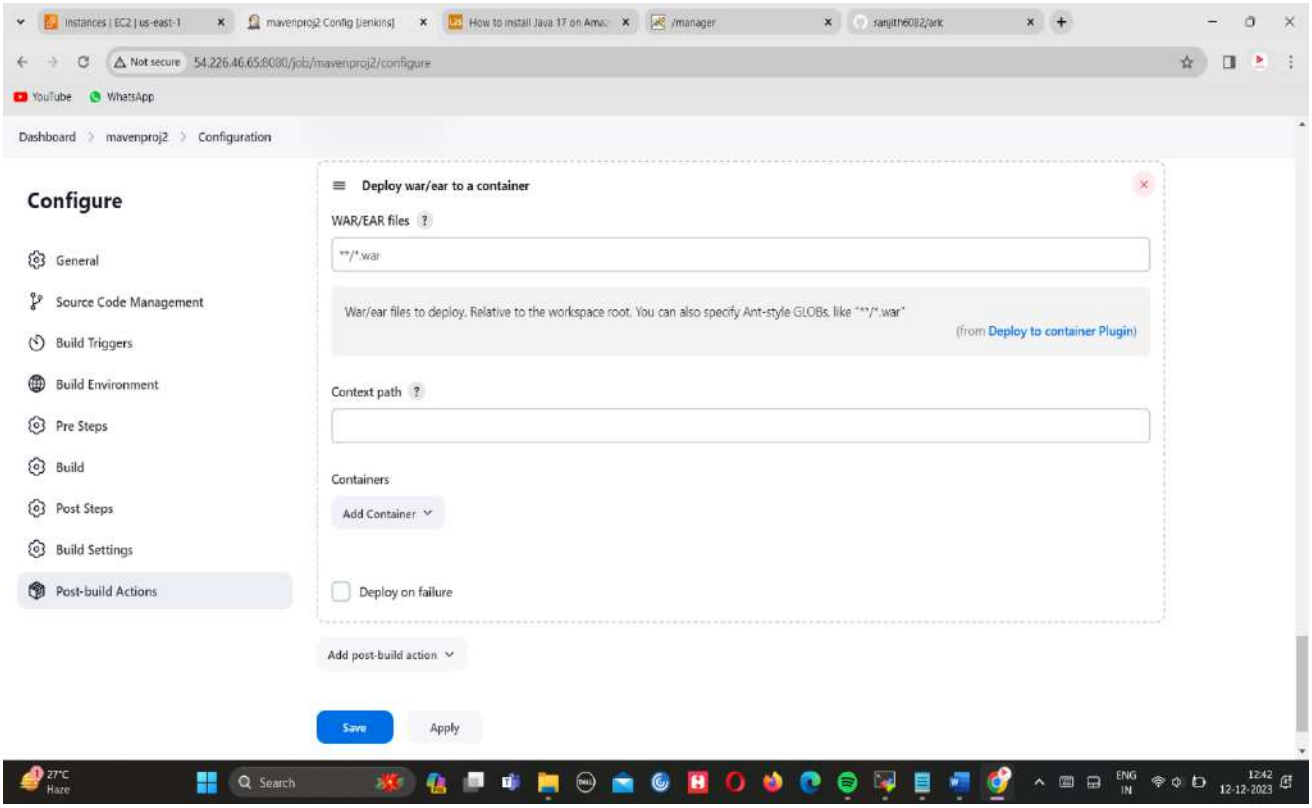
➔ Install the deploy to container on install plugins



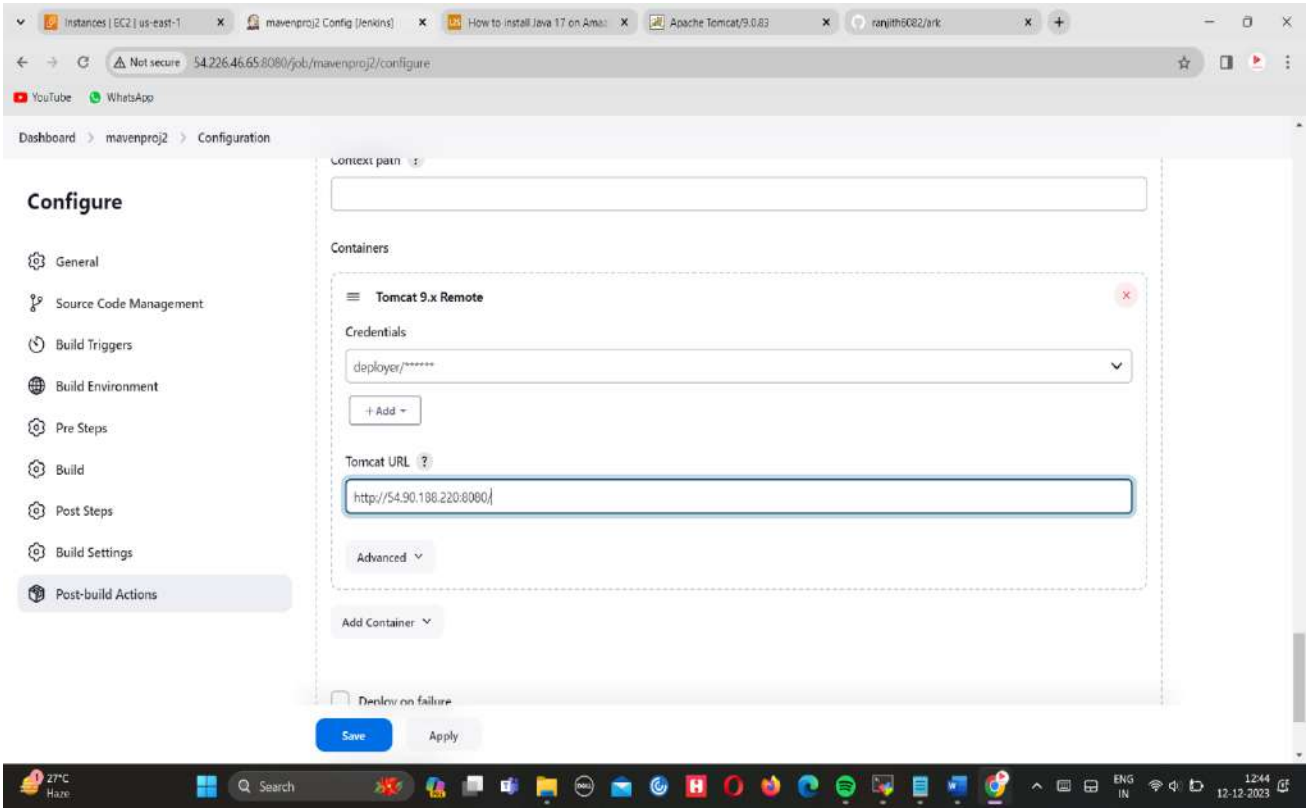
➔ we need to select the deploy war/ear to a container option



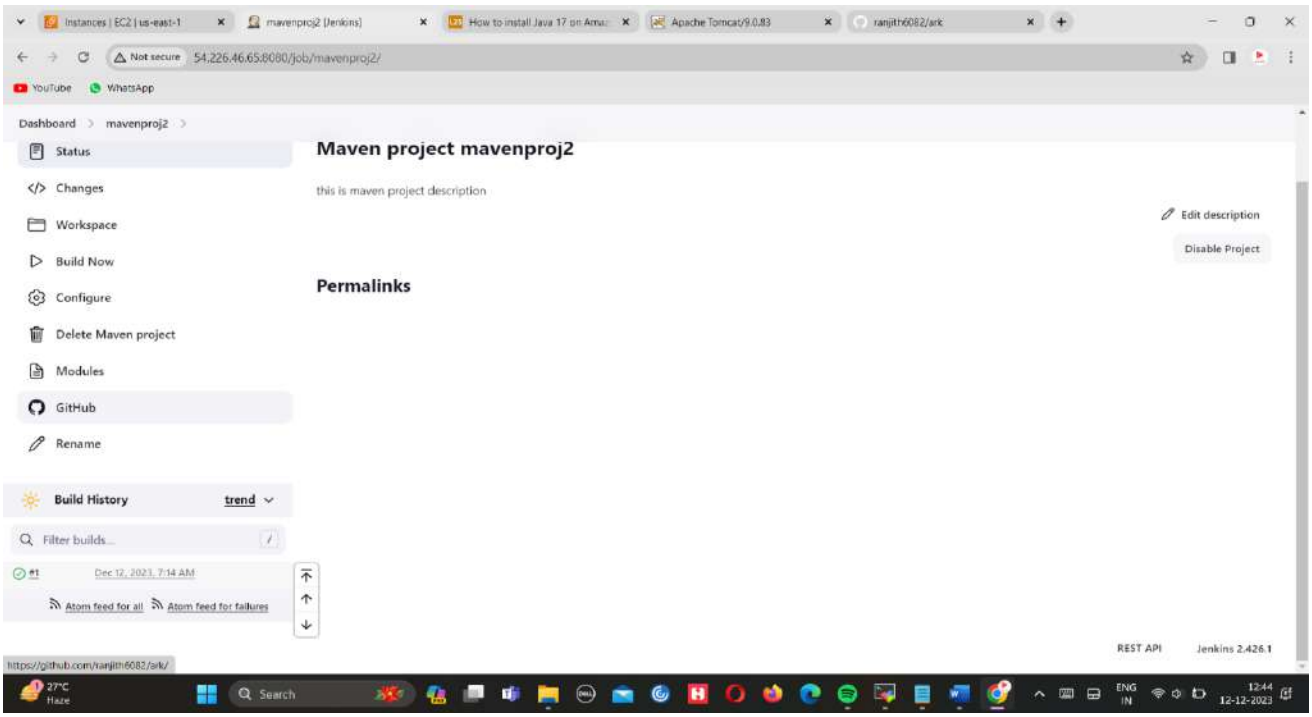
➔ Give **/*.war in WAR/EAR files



➔ Copy the tomcat url and paste it in below



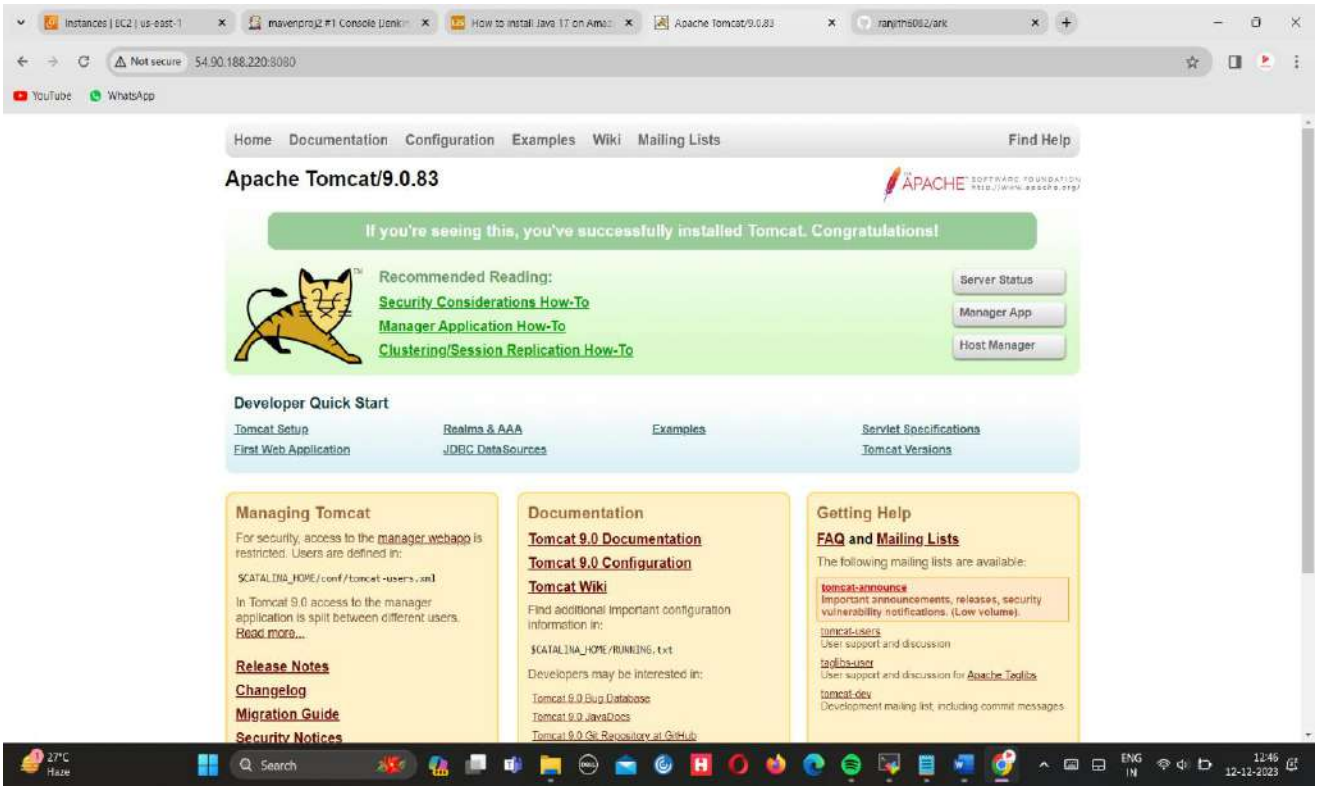
➔ Click on build now option, build will be done successfully.



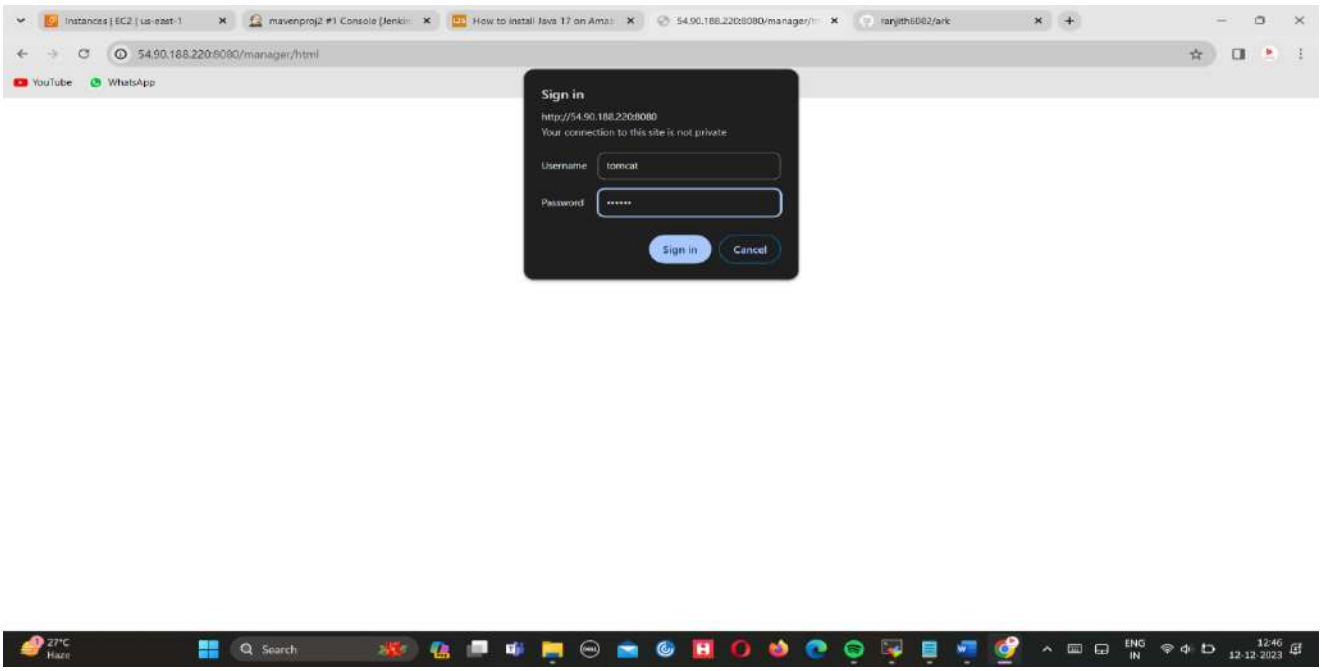
➔ Now, Open New Tab and search with tomcat IP :8080 and Redirect to tomcat page.

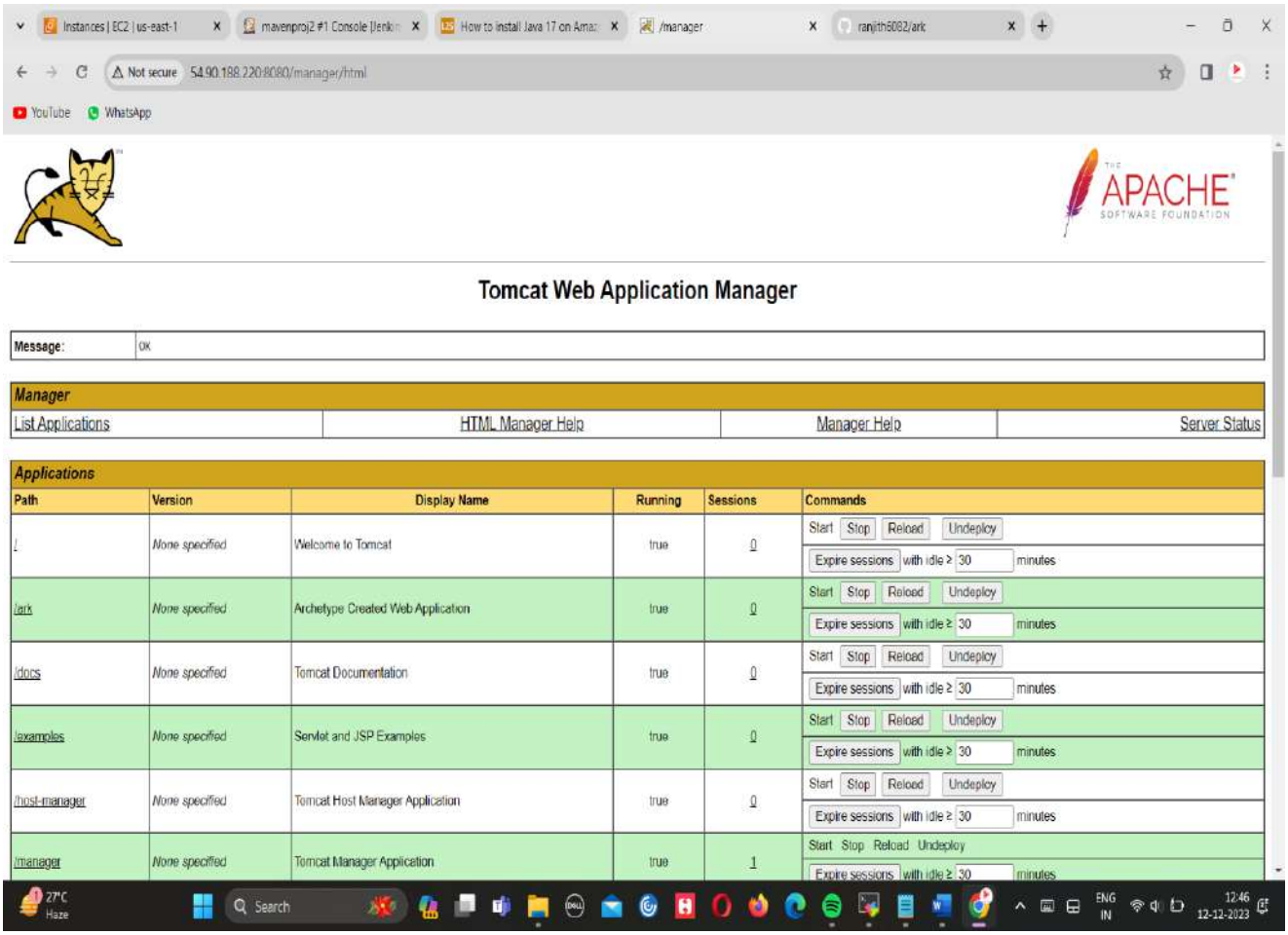
➔ There click on manager app.

➔ And Login to the tomcat using the credentials of tomcat user having deployer.



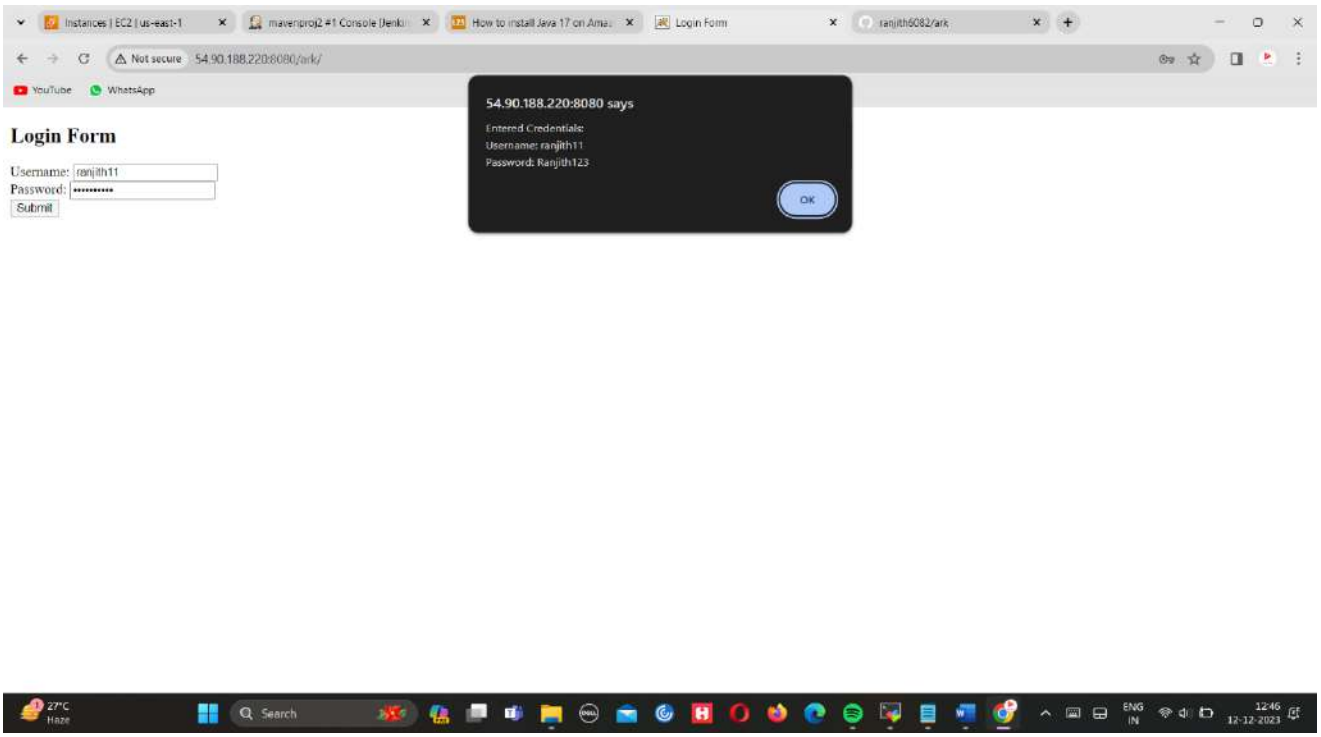
➔ Give the credentials of username and password as we specified on tomcat_users.xml.





➔ After successful login. Click on the project that deployed maven project from the Jenkins after building the project.

➔ It will run project on tomcat server.


Instances | EC2 | us-east-1
Login Form
ranjith6082/ark
Not secure
54.90.188.220:8080/ark/
YouTube
WhatsApp
Login Form
Username: ranjith11
Password:
Submit
54.90.188.220:8080 says
Entered Credentials:
Username: ranjith11
Password: Ranjith123
OK

27°C
Haze
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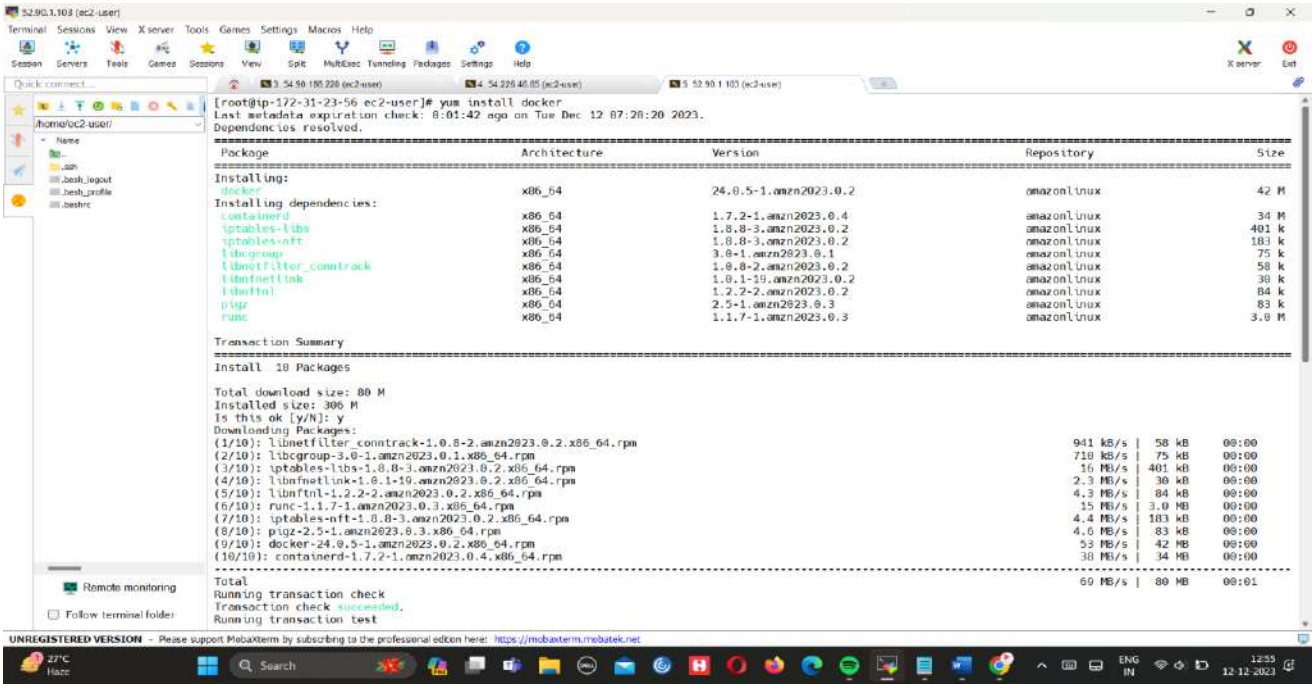
12:46
12-12-2023

Experiment 6

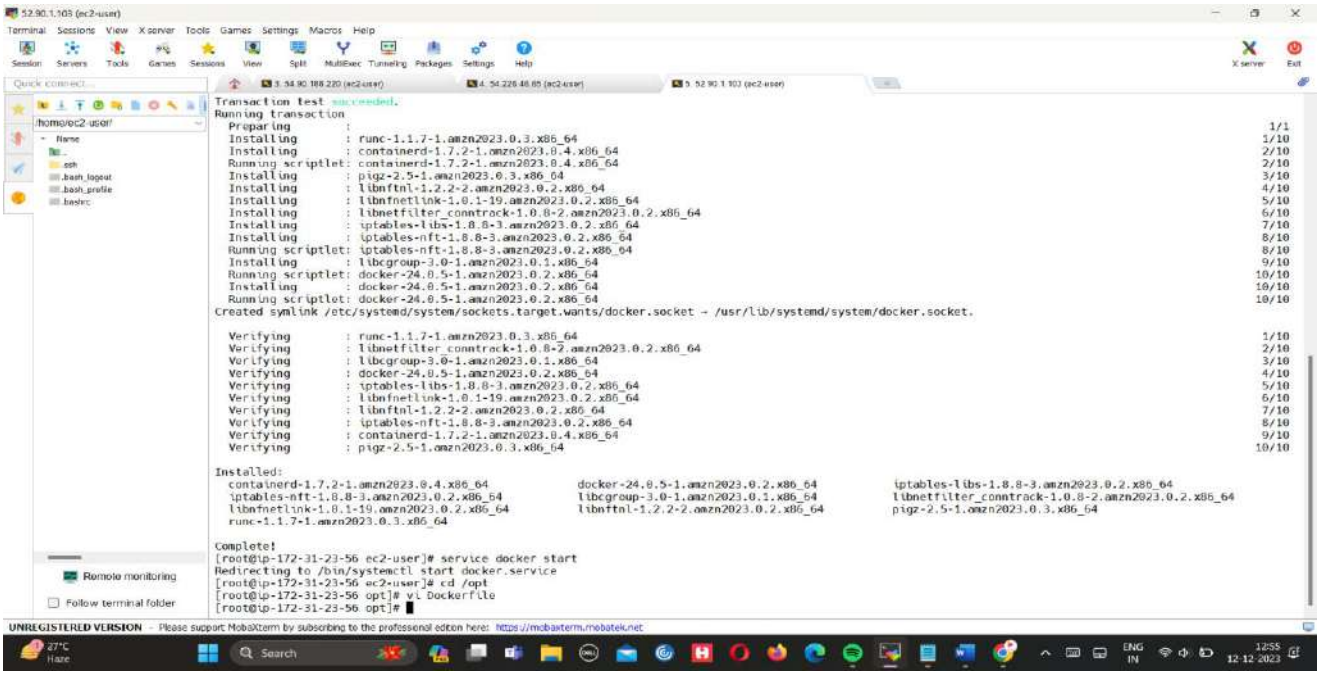
6. Demonstrate to create a docker container using customized docker image with base image ascentos/fedora.

Procedure:

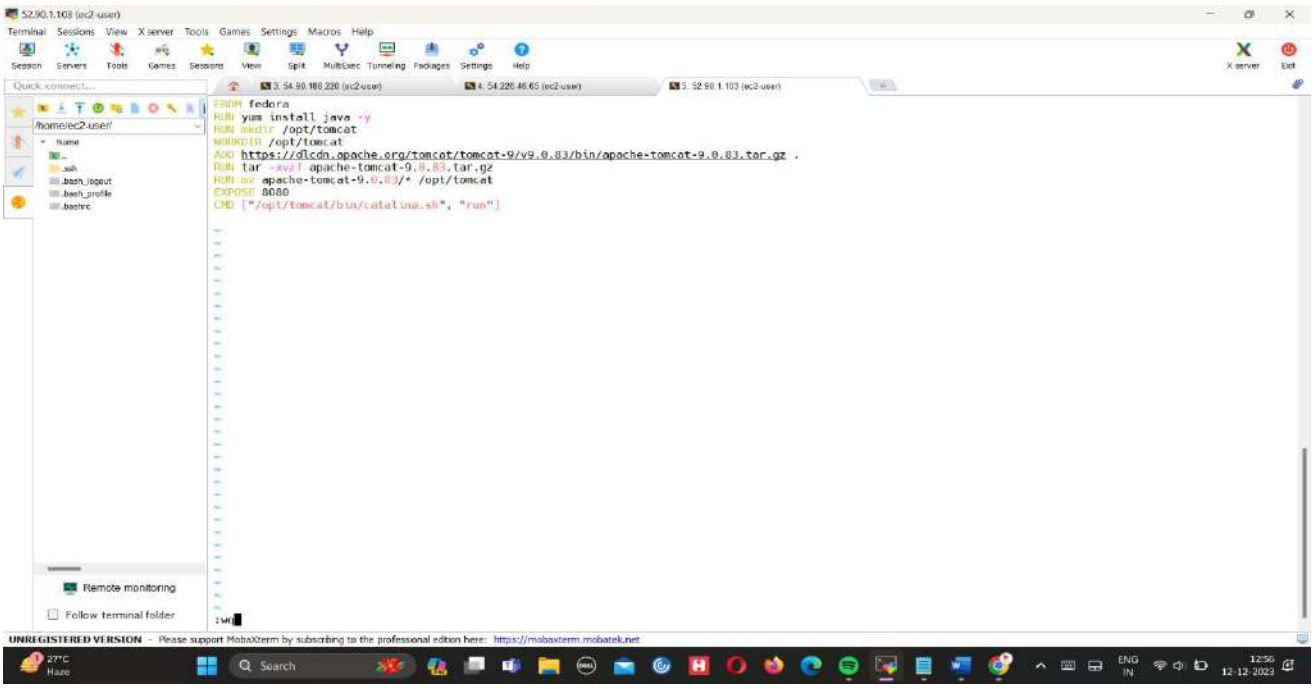
➔ Firstly install docker using yum install docker



➔ Start docker service using service docker start command



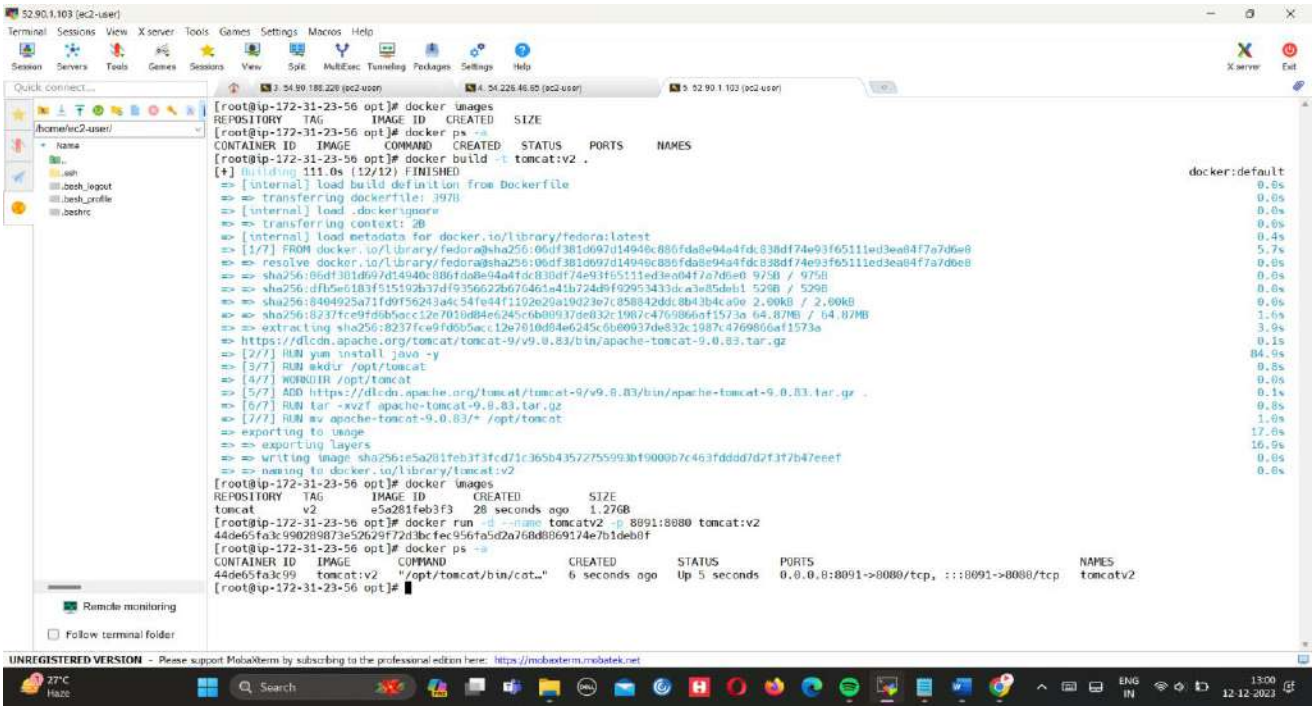
➔ We need to add instructions on a Dockerfile.



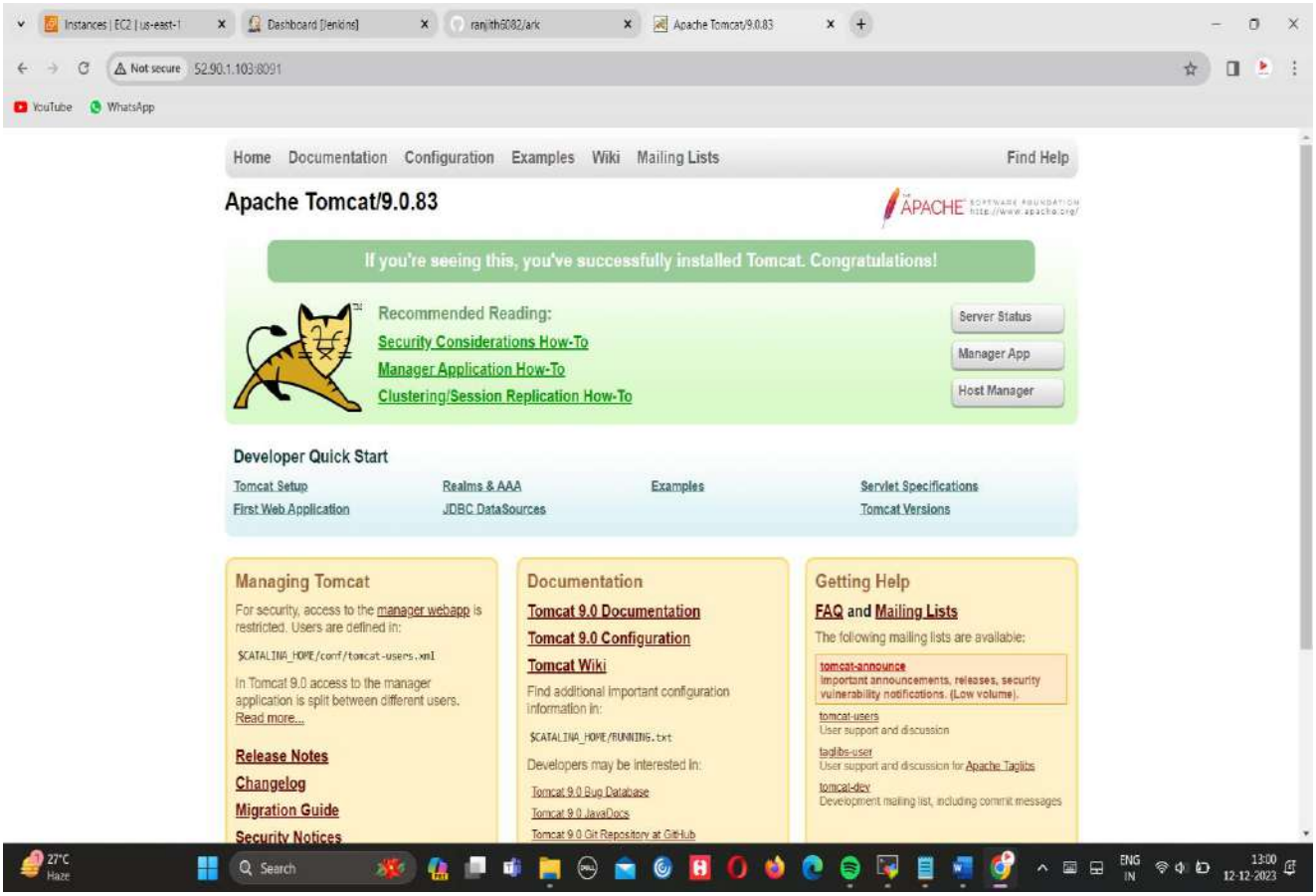
➔ Now, Create a Dockerfile in root. To create docker image from base image of fedora. Usingthe commands.

➔ Build a docker image mytomcat:v1. By the following

➔ Create container from the mytomcat:v1 image.



➔ Now , Check in browser tomcat homepage will display.



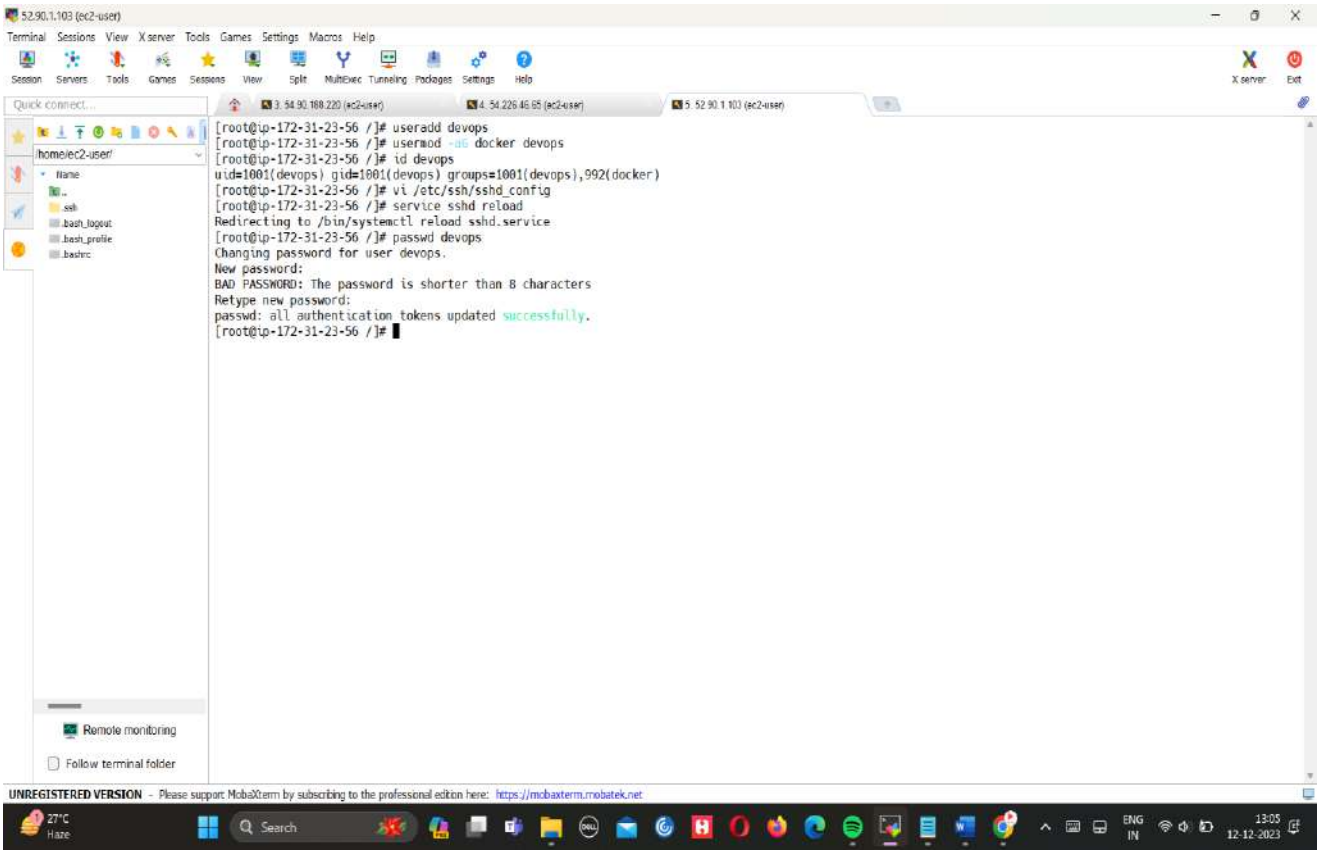
EXPERIMENT-7

7. **Demonstrate CI/CD job to build maven application and deploy it on docker container using Jenkins.**

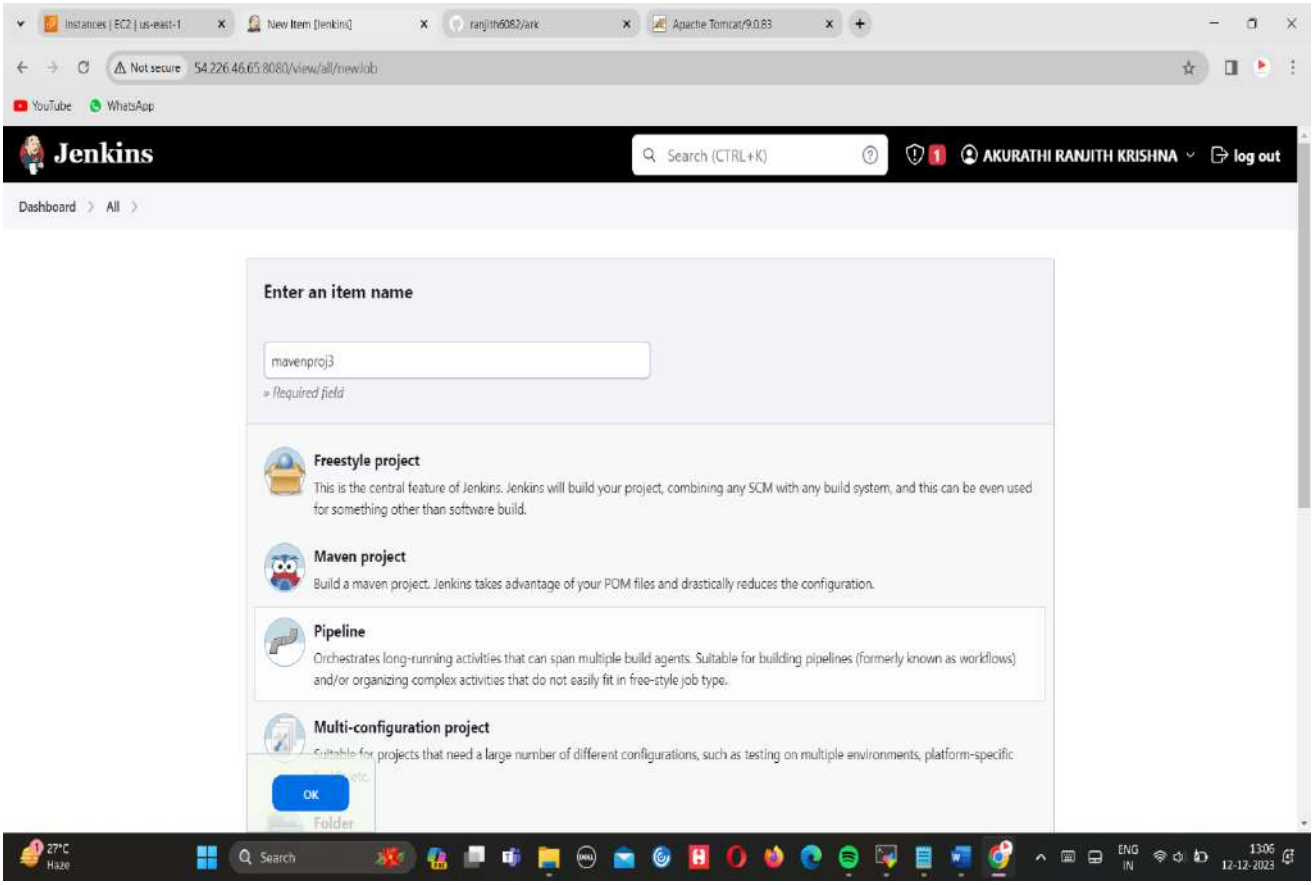
Procedure:

➔ Open Mobaxterm connect to docker instance. And add a docker user and setpassword.

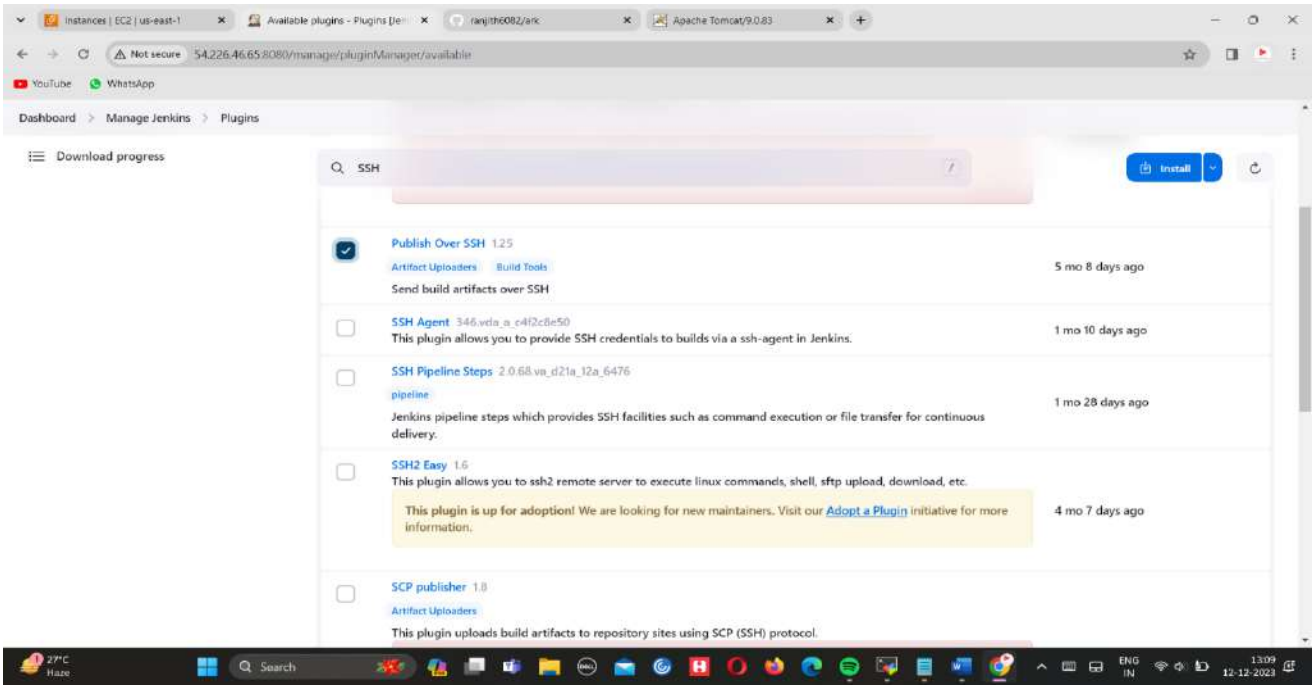
 Add the user to docker group. Check the user by id user.



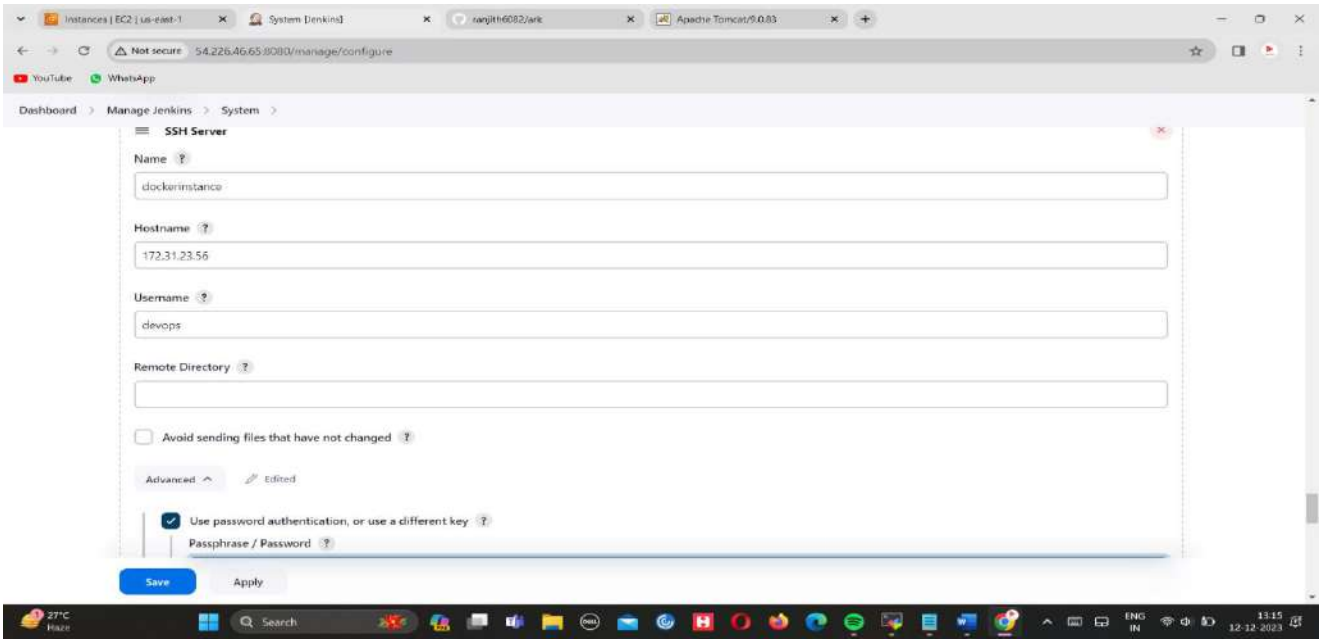
➔ Move to Jenkins and create a maven project.



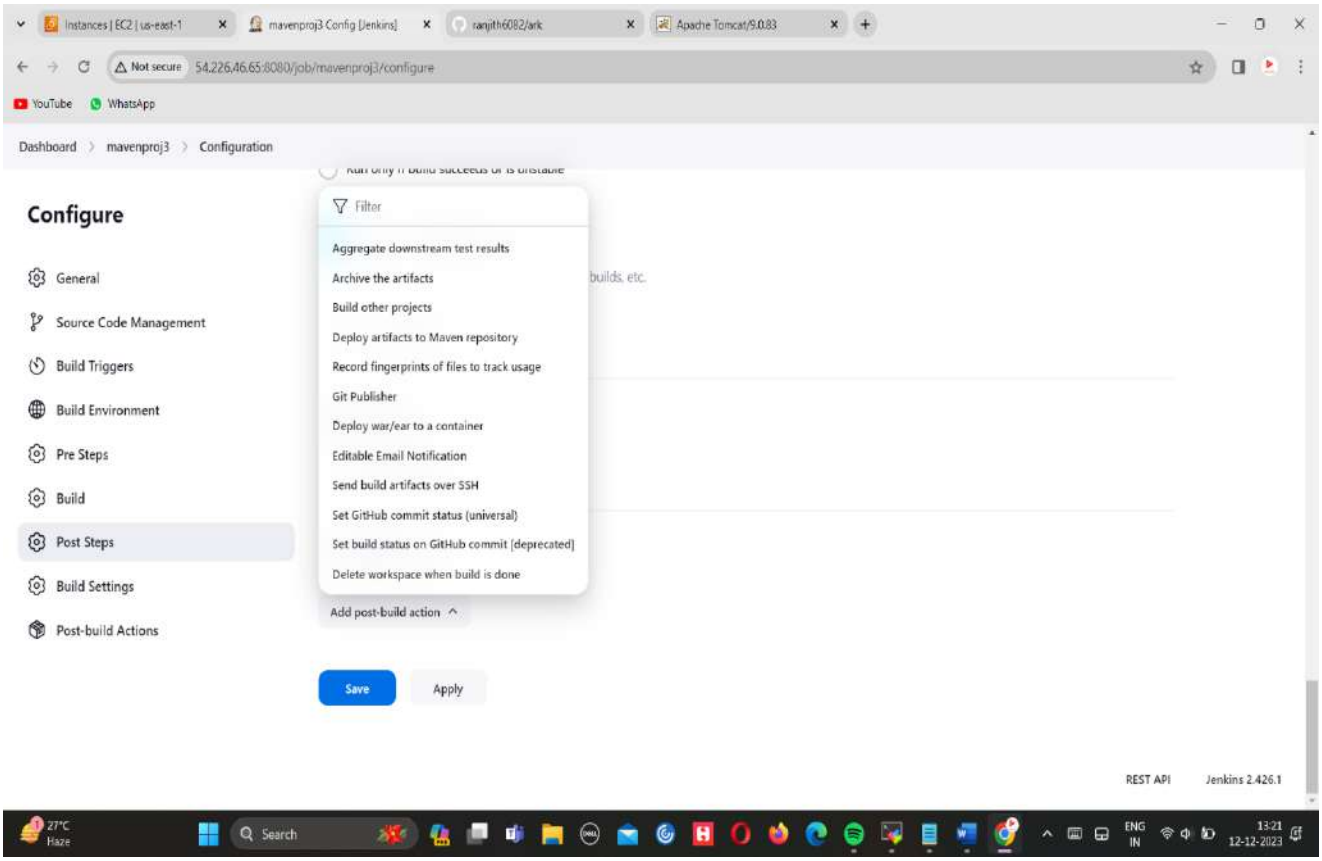
➔ Go to plugins and install Publish Over SSH plugin



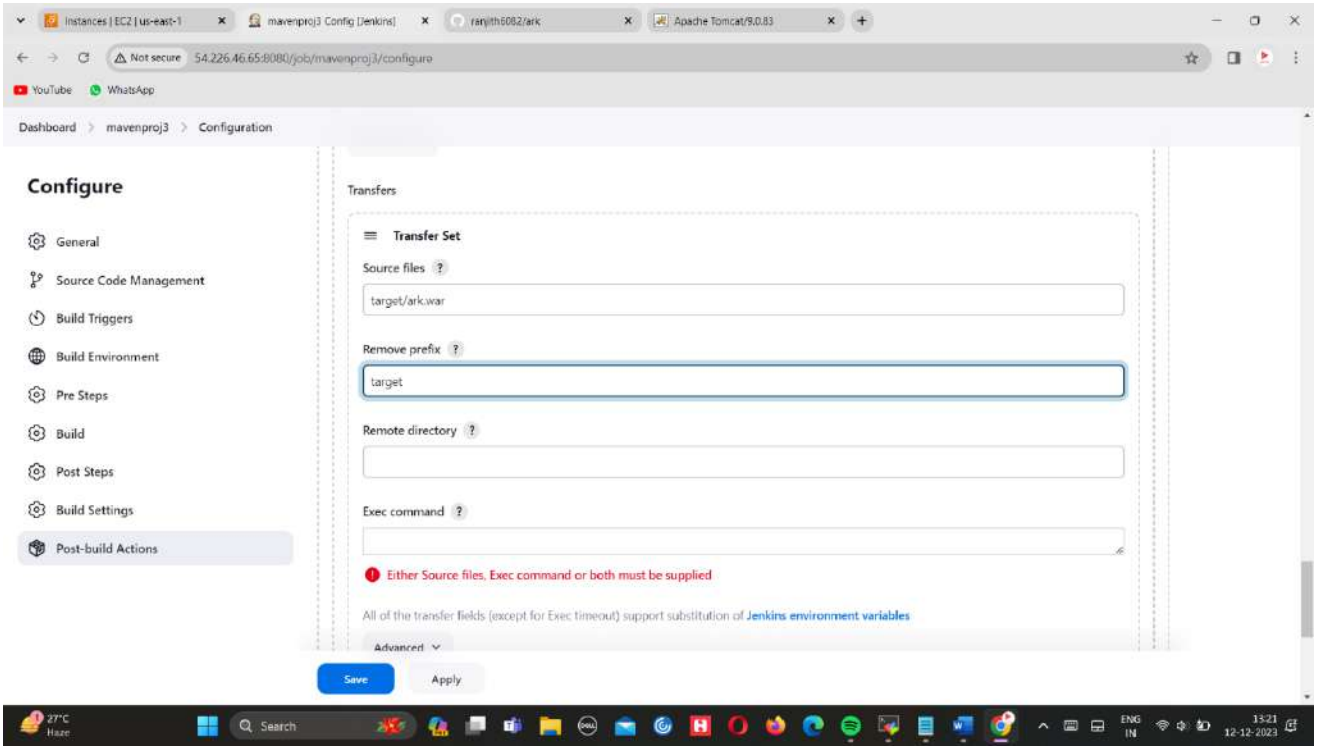
➔ Before that go to manage Jenkins>>system>> add SSH.



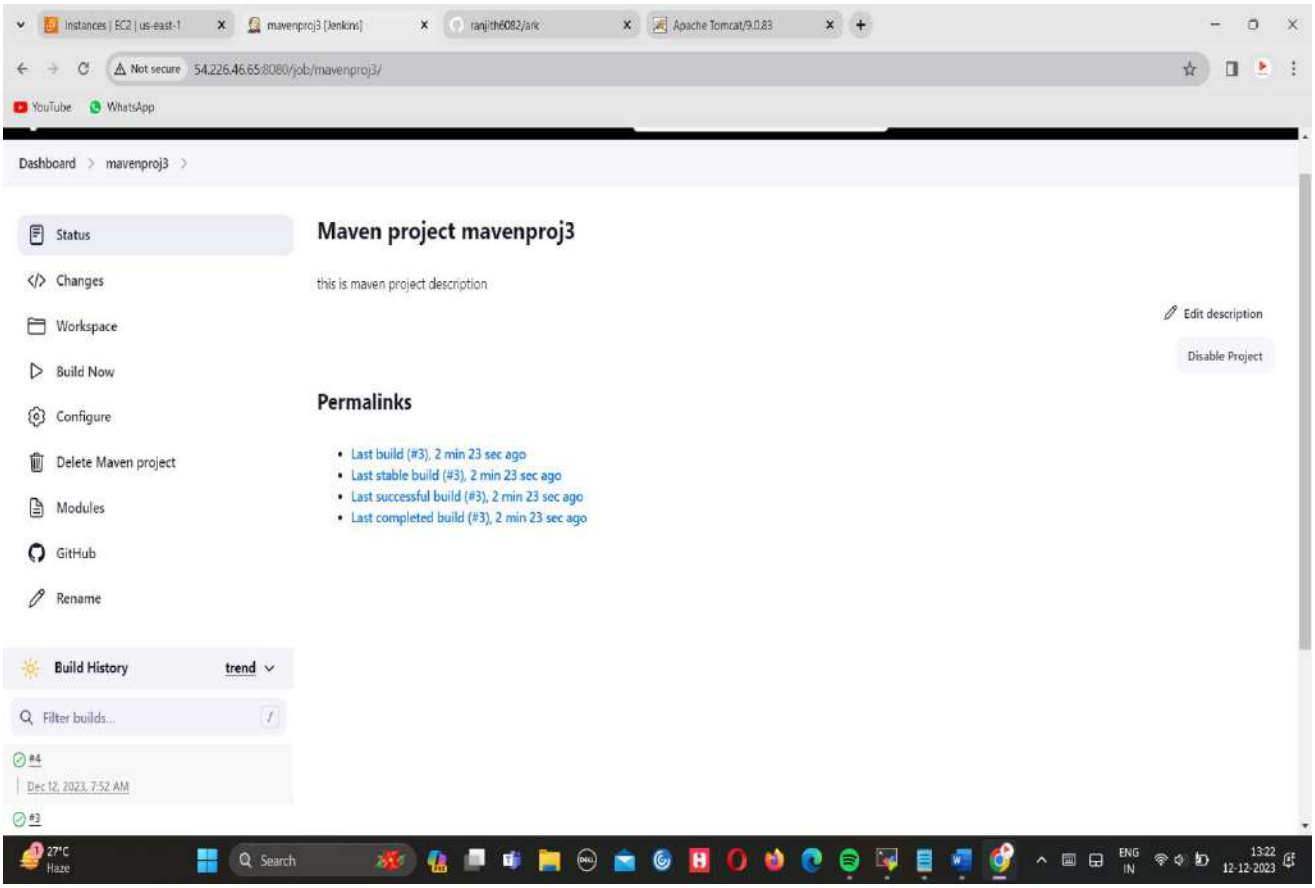
➔ Select the Send build artifacts over SSH



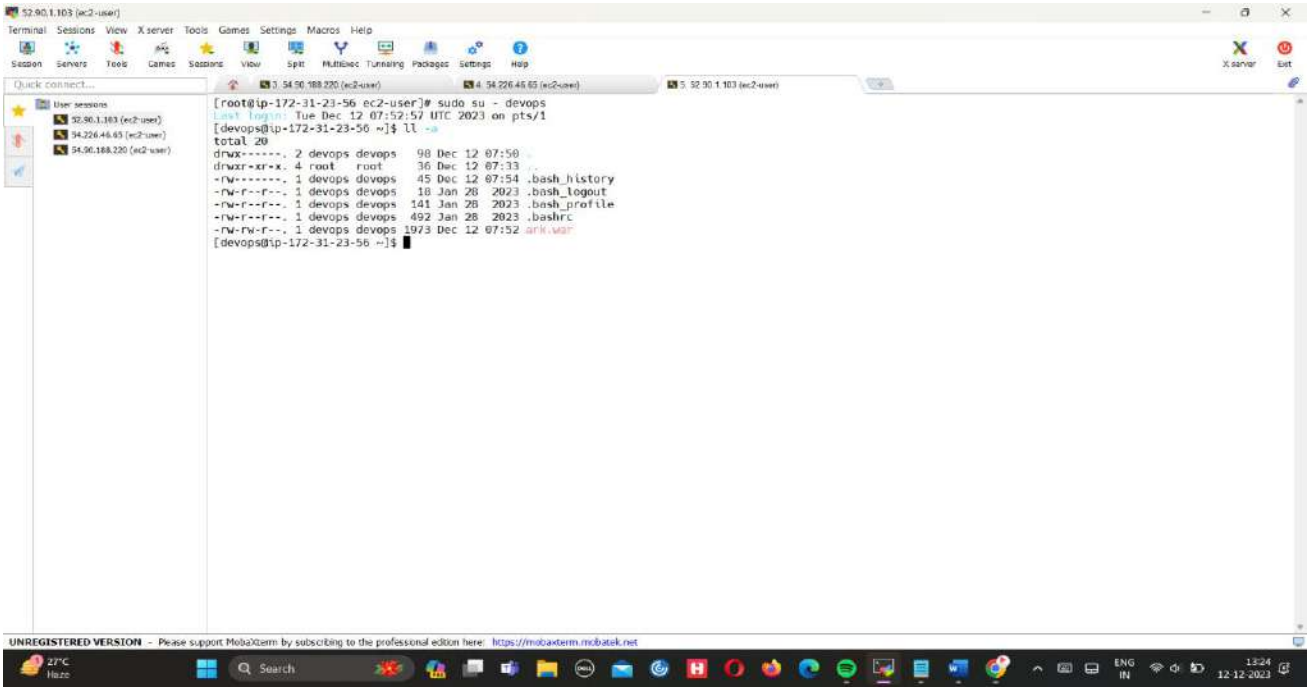
➔ Copy the war file location paste it in source files and remove prefix



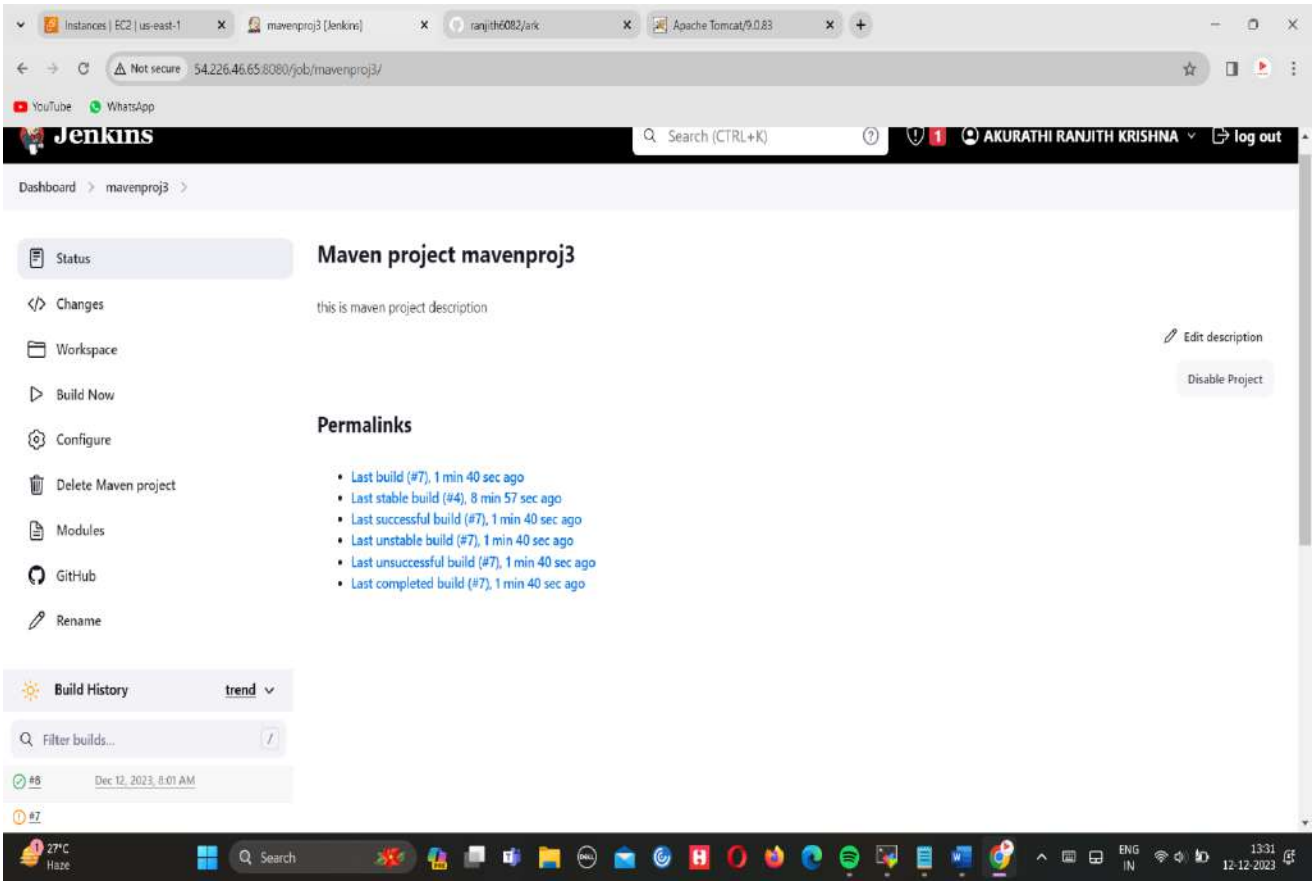
➔ Click on build now option



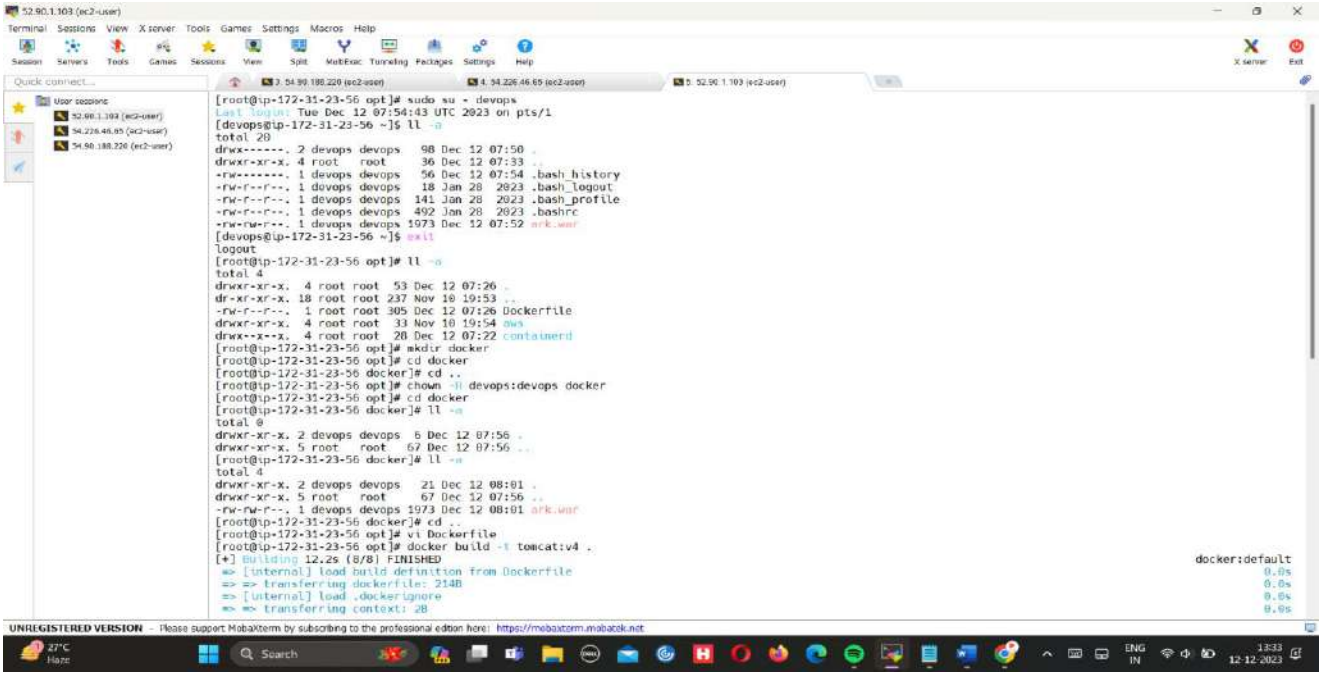
➔ War file will be stored in devops user location



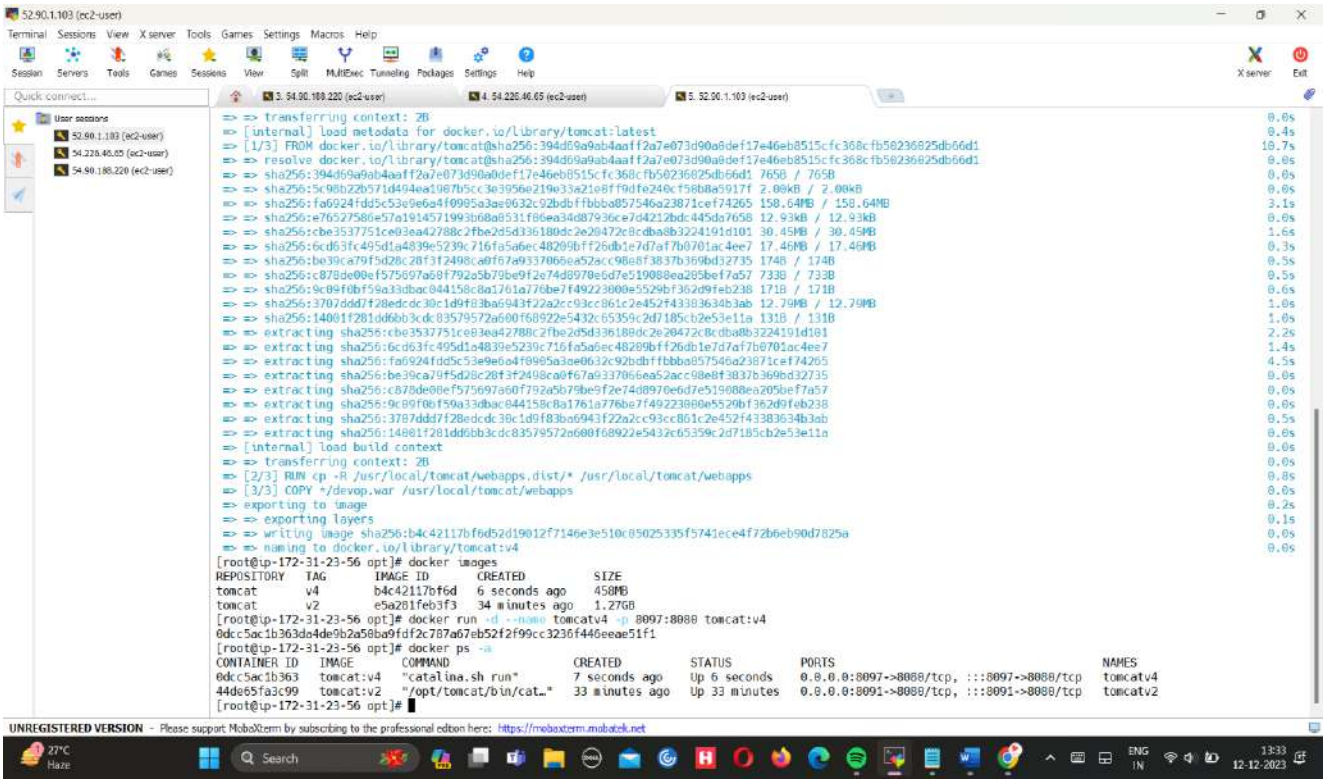
➔ Click on build now option, build will be done successfully



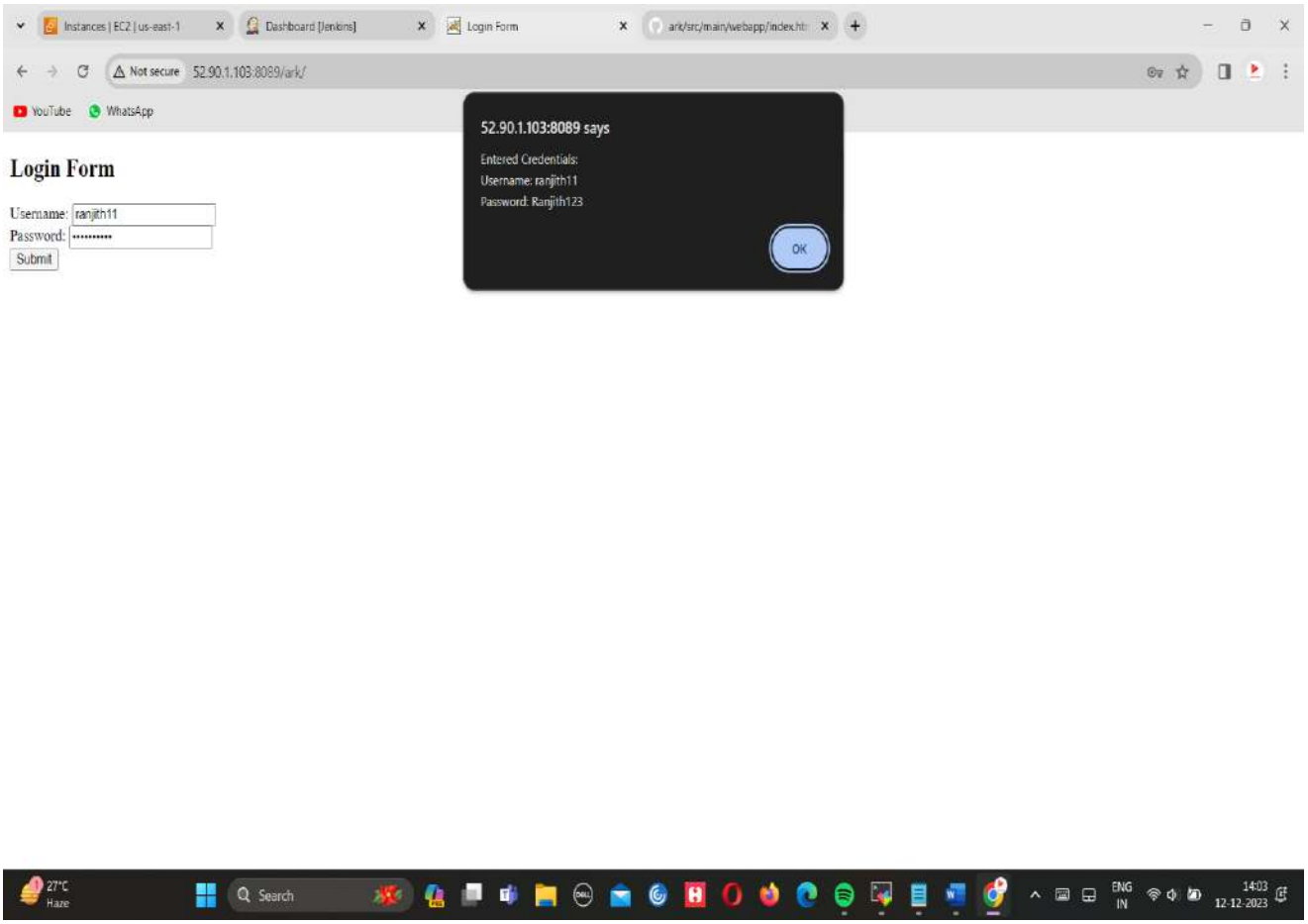
➔ We need to create image using docker build -t tomcat:v4 . command



➔ We need to create a docker container for image tomcatv4 .



➔ Output on the browser using Public IP : port / .war file name.


Instances | EC2 | us-east-1
Dashboard [Jenkins]
Login Form
Not secure 52.90.1.103:8089/ark/
YouTube
WhatsApp
Login Form
Username: ranjith11
Password:
Submit
52.90.1.103:8089 says
Entered Credentials:
Username: ranjith11
Password: Ranjith123
OK
27°C
Haze
Search
ENG
IN
14:03
12-12-2023