1.
Create 1 master machine and 2 slave machine

Install java in all of them after updating them
sudo apt-get install openjdk-11-jdk

Install jenkins only in the master machine .
https://www.jenkins.io/doc/book/installing/linux/

use weekly release.

Now copy the machine public ip and check public-ip:8080
jenkins should be running .

now do a cat of `/var/lib/jenkins/secrets/initialAdminPassword`

```
install suggested plugins
set up user-name and password

2.Set up the Agent .
Node name - Slave1
Permanent Agent

Remote Root Directory
/home/ubuntu/jenkins
Launch Agent
Launch agent via ssh
host - private ip of the slave
Credential add - give the .pem file of the slave
kind- ssh username with private key
treat username as secret
enter directly - add - .pem
select the credential created.
Host key verification strategy - non verifying verification
strategy

3.Add new node
Type permanent agent
Remote Root Directory
/home/ubuntu/jenkins
Launch method - Launch method connecting to its controller

Click on the slave name
Run the unix command
configure the tcp rule by going down
```

tcp port for inbound agent - random

All nodes in sync

4.Create a github repo and create file .
Create new branch develop and put the develop file as well.
create job1(item)
free-style project

Description - Specify where this project should run .
Slave1
Source Code:- Management Git
Give Repository URL
https://github.com/penn-api/master.git

Branch to build - branch specifier - develop branch.
Build Triggers
Github hook triggers GITScm polling

Github branch setting → webhook → add webhook → give the **payload url** or the jenking —-> public-ip:8080

Now build the job
Now go to your slave1 machine check for jenkins folder then workspace then jobs and check the files.

5.Now do the same thing for the Slave2 as well create job2 .

6.Now go to job1 , configure it and in the post build action build other projects

give job2
save it

7.Build steps
execute shells
sudo apt-get install docker.io -y
sudo docker build -f doc -t demo .
sudo docker run -itd -p 83:80 demo

In the meantime go to the Develop branch
doc file
FROM ubuntu

```
RUN apt-get update -y
RUN apt-get install apache2 -y
COPY index.html /var/www/html
ENTRYPOINT apachectl -D FOREGROUND

index.html
what to know anything!!!
```