Deveps Assignment 3 bare php uchastes in github. be Case step 3. Gelling the code from github. github repository Ball Glane • sada the gi git clone <copy the to local cord from githech If the folder already the distory exists, then forerfrelly ne • sredo am of folder name> Again zere the clone command step 2: Setting up jenkins 1) If jenkins command not up and running then were the seda systemet! start jenkins Jenkins is password - Jenkins 21239 Step 3: Setting up the slave 1) Go to jenkins. 2) Select Manage jenkins 3) Scroll down to "Configrere Global secuntry" - select Scroll down to Agents option 5) select the "Fixed" option and write 9000 for the port Save 7) Again in manage jenkins select "Manage. Nades Land Clouds"

8) Select +New Node (top left corner) 9) Give Node name = abeentre - ip address of slave-server 10) Select permanent Agent 11) Save 12) (3) Nember of executers = 1Again select that created node and configure details 14) In the slave machine create a folder jenkins. the slave machine han thes command in •seido mkder jenkins folder When will be created. be created use in /home/msis 'ls' command to lest the contents. Holders will be displayed in blere, text files in white) 15 In the master jenkins cahile adding the configuration to Slave node Thome Imsisl jenkins in the semote root direttory: 16) Usage: Use this node much as possible 17) Launch method: Launch agent by connecting it to the controller 18) Save 19) Go to Configure System' manage jenkins Go to Jenkins Location

21)
In the Jenkins URL change the ip from localhost to the master IP address. ex:-http://172.16.51.27:8080/
22) Save
on the crated node
23) Click
24)
You will get czerl and java command Copy the Curl command to slave & execute
25)
26)
Copy the java command use seedo and copy the java command and ro execute
27)
Nodes will be connected to master.
Step 4: Creating and hosting plap webrite on laut
Select + New item
select 3) In Rete Restrid cabere this project Label Expression select the slave node created can be han
+ Source Code management toco option
3/13
5) Selat get
*) In the repository URLs copy the coal fren gid paste it
2) Chects of the branch in jenkins and in gethub both same

If the branch name given in Githaud is marter same has to be given for while copying the getteb URL. If its mard then in Jenkins maro has to be given 9) Go to Build steps. 9) Select Execute shell option 10) Gopy the the shell script file contents from doply file in github and paste it 11) Save it 2) Beild the project 3) Go to the slave machine 14) to hit localhost:80 15) This should open bookalbum webrite 16) bookalbum in the folder should be slave machine copeed /var/www/html Step5t Pushing Step 5: Containerging the docker image a php application to docker hub. and parking 1) Geate docker credentials. → Go to manage Jenkins Go to Manage Credentials Click uny "system" option cany Click on the Global" option → Click on "+Add Credentails" → kind has to be "Username with password" →Scape - Global (Jenkins, nodes, clems, all child items)

Give your dockerhub Wermane

 \rightarrow Goue payour password for your dockerhub profile \rightarrow ID Give a name to identify the credentials.

Create a 3) freestyle object by selecting + New Filem

Restrict vahere this project can be ran- select this

option 4) Write the slave node name abante 47 server

5) Source code management - select git

the Github zerl and paste it

In build steps Sebet Docker Beild and Publish

8) In repository name a name Give dockerhub username and that has been created by you in dockerhub. Example: nidhisraoldockerdemo \rightarrow This has to be

)و

already created in dockerhub In Tag - you can mention version like VI

- 10) Registry in Credentials: Select the dockerhub credentials created
- 1) the first stop. Save it and breeld the project
- 12) YOU can check in the dockerhub the a new docker ima -ge with the given tag will be created in your hepository.

Step6: If we want to pull image to slave node and rean the docker image

- 1) Copy all the In build steps stops from select Stop 5 execute shell ary name
- 2) sudo docker. zen name 4012:80 nidhisraoldockerdemo: v1 denadorker -it-d-p

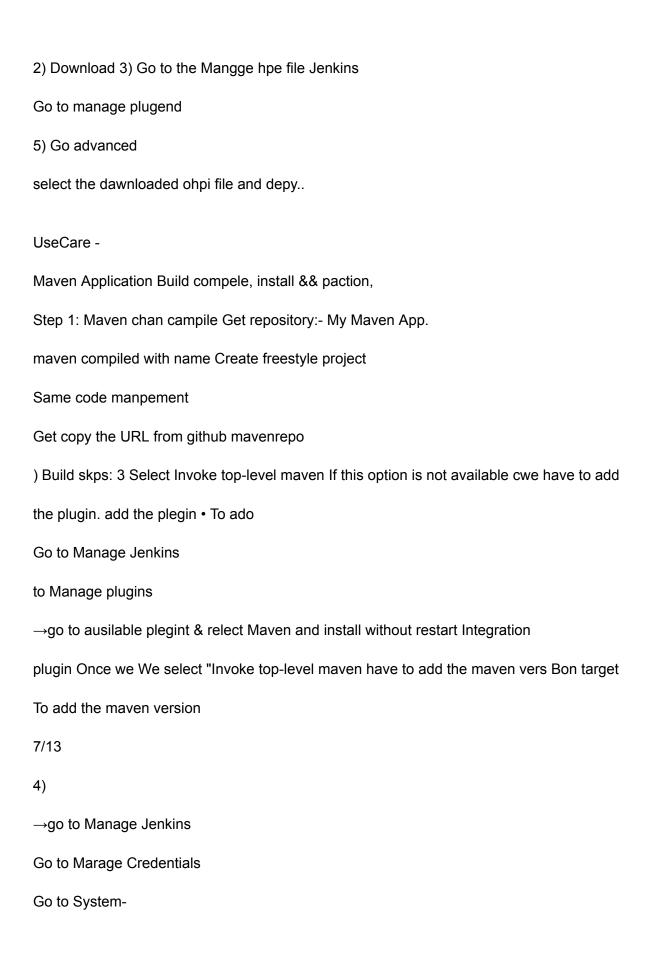
The newly created image in dockerhub

3) In the slave machine go to localhost:1012

You will get boshalbum webrite.

Step 7 Kubernetes deployment 1) Go to + New item Create a new freestyle project Copy the git URL 5/13 In the build step select Deploy to Kubernetes 4) I'm the Reyso textbox provide your Werrame In the build step select Deploy to kubernetes 5) In the key Javebe config name textbox provide the kebent, that you have added in the credente 6) In the Is confeg feles give deployment yaml, seruice, yaml files name as comma separated valuer 7) Save it and build a) Go to terminal የ) seh 172.16.51.53@ 9) ssh chefrerver @172.16.51.53 password chef@123 ip=172.16.51.53 username = chef server 10) seda kubectl get pods This cisell shows the newly created pod for the bookalbum 11) sudo hubectl get sve →This will show the reenning with its port number services

Mit the thlove kubernetes node with the above shown ip. It will show the book album webrite
12)
Slave ip address = 172.16.51.50
Username = ansible.
password = sois@123
steps to creat the credential for heebernetes
SSH to chefserver @ 172.16.51.53
ed lakeeba
sudo vi lohube/ config
3) Copy this file content completely
4) Go to Jenkins
5)
Go to Manage Jenkins
6) Go to credentials
8)
Add credentials.
In kind select: kubernetes configuration (kubeconfig)
?) In Isebeconfig relect enter directly
ro) The file contort copied be parted shazeld be here
Create the key
Steps to add kubermeter plugin if not present.
Go to github.com/Nidhi-s-Raol Plegen



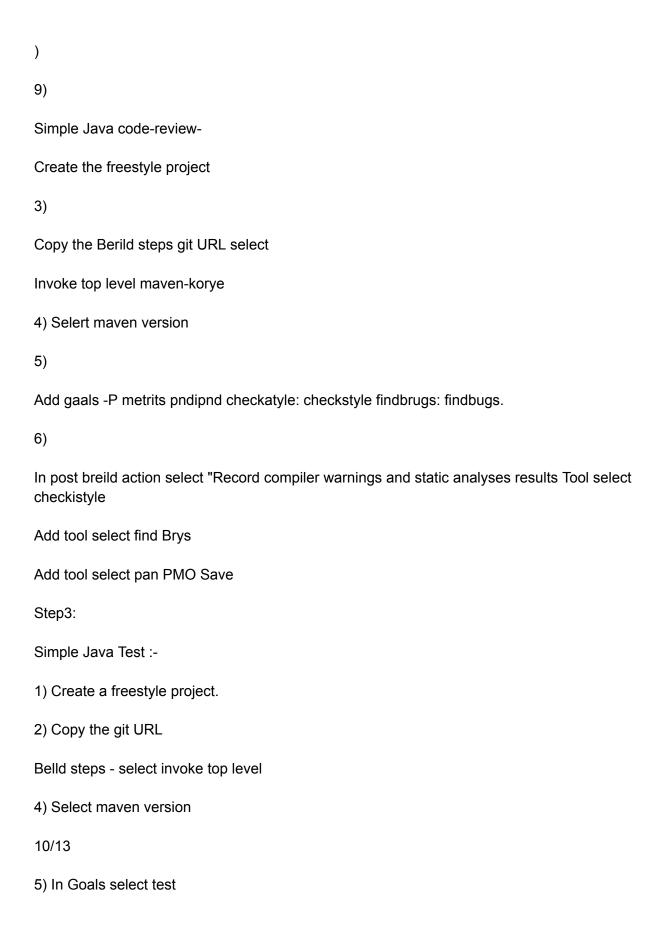
Select the Global Coredential
→Add C
→ Go to Global Tool Configecration
Scroll down to Maven
Select Maven installations
→ Give name to the maien version
→ Save
In Maven You gave Version select the in step 4.
Goak give Clean compl. comprle
6) Past Braid artema
Beard other pojeds
profeds you wand to build give next profect to ren mame cabech after the successful completiem. of maven_compile_demo.
Save
Step: Maven test demo
Greate demo" a freestyle project with name" maven-test-
Source code management
"Got copy the URL from github mytrousnapp
Beald stops.
•Invoke top-level Maven targets
Maven version: maven.

```
Goals: validate test
4) Post brüld actions.
preblesh HTML reports.
Reports HTML directory to archieve in this give
tanget Index. page *.xml
• Report title - HTML report
5)
Q
In Post build actions
publish JUnit test result report
8/13

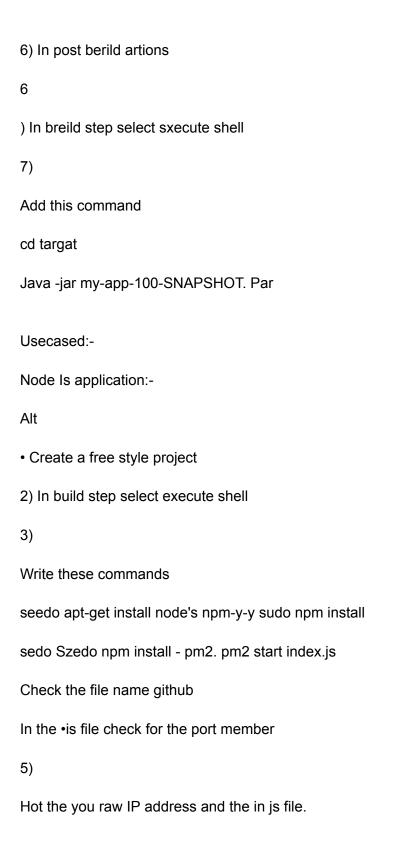
    Test report XMLS

target 15 target! serrefire-reports/*.xml.
Save
Step 3: Maven. 1& 2 steps are install package same as before
3) Select build steps - in that select invoke top-lavel Maven targets
4) Select Maven & in goals - install package
) Build step select execute shell
Give this command.
→faun jor my-app-1.0-SNAPSHOT.jar
→ed target
```

```
How to create CI/CD pipeline:-
Install pipeline plaugin
Go to mangpe Jonkine Go to maroge plafins
in "available plagins search build pipeline &
install
2. In Dashboard dick + next to All
4
Select beeild pepeline view In the
broupstream (downstream config select the form- preject that initiates the pipeline
Use case 3
Simple - Java - Meven - App.
step 1:
Simple Java clean compile :-
1) Create freestyle project simple java clean
2)
Copy the Gethich _ simple-jour-maven-app
3) Burid steps - Relect Invoke top lovel Maven target
4)
select the marlen version
5) Add Goals - clean compile
step 2:
```



In post post brald Actions
In reports
select pubksh HTML mports
HTML domtory to archive: target
Index pagri
Report file HTML Report
In post-berld Actions. select Publish Jun
test result report Test Report XMLO target Isureftie-reports te
3) to check if this the copied to local or not che the
→ path dlwarllibljenkins/workspace/
→In this, find your genkins project name
→Go to the folder
عاد
→ed target
\rightarrow In this you will find the
Step:- Jawan-maven-package
1) (mate freestyle project
2) Copy ght 3)
Beesid stops - Invoke top love I maven project target.
Maven version
5)
Goals - test install package



```
Ansible:-
git clone Ansible Work Updated git URL.
3) cd Ansible blerki Updated!
cd Lampansible
3) sudo ang lamp.yml nano
In this the host
name
Remove the version specified
save exit
رد
લ)
5) scudo nano hosts
9)
Add the host name username & ip of the of lamp.yml other system. and
[lampserver] 172.16.51.47 ansible-ssh-user = msis
0)
sudo ssh keygen - sa = bdakey
give a then felename enter enter
sudo ssh-copy-id - bdakey.pub msis@172.16.5
47 sudo ansible-playbooks lamp.yml --ask-paer -i hosts
-c Go to the Hit that connected systeem IP addres
```