SSH HOMEWORK

GENERATE KEYS

#PS
ssh-keygen -b 4096

FOR UBUNTU

#PS
vagrant init generic/ubuntu2010
vagrant up
vagrant ssh

#BASH
sudo adduser gustavo (password: system32)
exit

#Change network adapter on vbox from nat to bridge

#PS
ssh gustavo@ip_ubuntu (Enter password)

#BASH
mkdir .ssh
chmod 700 .ssh
exit

#PS
scp "C:\Users\Usuario\.ssh\id_rsa.pub" gustavo@ip_ubuntu:~/.ssh

#BASH
ssh gustavo@ip_ubuntu
cd .ssh/
mv id_rsa.pub authorized_keys
chmod 700 authorized_keys
exit

#PS

ssh gustavo@ip_ubuntu

#INSTALLING DOCKER ON UBUNTU

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o
/usr/share/keyrings/docker-archive-keyring.gpg

echo \

"deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-
keyring.gpg] https://download.docker.com/linux/ubuntu \

$(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

sudo apt install docker-ce docker-ce-cli containerd.io

sudo apt-get install docker-ce=<VERSION_STRING> docker-ce-cli=
<VERSION_STRING> containerd.io

sudo docker run hello-world

#CREATE DOCKER VOLUME FOR JENKINS AND INSTALATION

docker volume create jenkins-data

docker volume create jenkins-log

mkdir docker

nano docker/dockerfile

#INSIDE dockerfile

FROM jenkins/jenkins

LABEL maintainer="hitjethva@gmail.com"

USER root

RUN mkdir /var/log/jenkins

RUN mkdir /var/cache/jenkins

RUN chown -R jenkins:jenkins /var/log/jenkins

RUN chown -R jenkins:jenkins /var/cache/jenkins

USER jenkins

ENV JAVA_OPTS="-Xmx8192m"

ENV JENKINS_OPTS="--handlerCountMax=300 --logfile=/var/log/jenkins/jenkins.log
--webroot=/var/cache/jenkins/war"

cd docker

docker build -t myjenkins .

docker run -p 8080:8080 -p 50000:50000 --name=jenkins-master --mount
source=jenkins-log,

target=/var/log/jenkins --mount source=jenkins-data,target=/var/jenkins_home -d
myjenkins

FOR FEDORA

#PS
vagrant init generic/fedora33
vagrant up
vagrant ssh

#BASH
sudo useradd gustavo
sudo passwd gustavo (system32)
exit

#Change network adapter on vbox from nat to bridge

#PS
ssh gustavo@ip_fedora (Enter password)

#BASH
mkdir .ssh
chmod 700 .ssh
exit

#PS
scp "C:\Users\Usuario\.ssh\id_rsa.pub" gustavo@ip_fedora:~/.ssh

#BASH
ssh gustavo@ip_fedora
cd .ssh/
mv id_rsa.pub authorized_keys
chmod 700 authorized_keys
exit

#PS
ssh gustavo@ip_fedora

ssh vagrant@ip (Enter password)
sudo passwd root (Change password)
exit

ssh root@ip (Enter password)

visudo

usermod -aG sudo gustavo

exit

ssh gustavo@ip

#DOCKER AND JENKINS

sudo dnf -y install dnf-plugins-core

sudo dnf config-manager \

--add-repo \

https://download.docker.com/linux/fedora/docker-ce.repo

sudo dnf config-manager --set-enabled docker-ce-nightly

sudo dnf config-manager --set-enabled docker-ce-test

sudo dnf config-manager --set-disabled docker-ce-nightly

sudo dnf install docker-ce docker-ce-cli containerd.io

sudo systemctl start docker

docker network create jenkins

docker run --name jenkins-docker --rm --detach \

--privileged --network jenkins --network-alias docker \

--env DOCKER_TLS_CERTDIR=/certs \

--volume jenkins-docker-certs:/certs/client \

--volume jenkins-data:/var/jenkins_home \

--publish 2376:2376 \

docker:dind --storage-driver overlay2

FROM jenkins/jenkins:2.332.2-jdk11

USER root

RUN apt-get update && apt-get install -y lsb-release

RUN curl -fsSLo /usr/share/keyrings/docker-archive-keyring.asc \

https://download.docker.com/linux/debian/gpg

RUN echo "deb [arch=$(dpkg --print-architecture) \

signed-by=/usr/share/keyrings/docker-archive-keyring.asc] \

https://download.docker.com/linux/debian \

$(lsb_release -cs) stable" > /etc/apt/sources.list.d/docker.list

RUN apt-get update && apt-get install -y docker-ce-cli

USER jenkins

RUN jenkins-plugin-cli --plugins "blueocean:1.25.3 docker-workflow:1.28"

```
docker build -t myjenkins-blueocean:2.332.2-1 .
```

```
docker run --name jenkins-blueocean --rm --detach \
--network jenkins --env DOCKER_HOST=tcp://docker:2376 \
--env DOCKER_CERT_PATH=/certs/client --env DOCKER_TLS_VERIFY=1 \
--publish 8080:8080 --publish 50000:50000 \
--volume jenkins-data:/var/jenkins_home \
--volume jenkins-docker-certs:/certs/client:ro \
myjenkins-blueocean:2.332.2-1
```

```
docker run \
--name jenkins-docker \
--rm \
--detach \
--privileged \
--network jenkins \
--network-alias docker \
--env DOCKER_TLS_CERTDIR=/certs \
--volume jenkins-docker-certs:/certs/client \
--volume jenkins-data:/var/jenkins_home \
--publish 2376:2376 \
docker:dind \
--storage-driver overlay2
```