Assignment
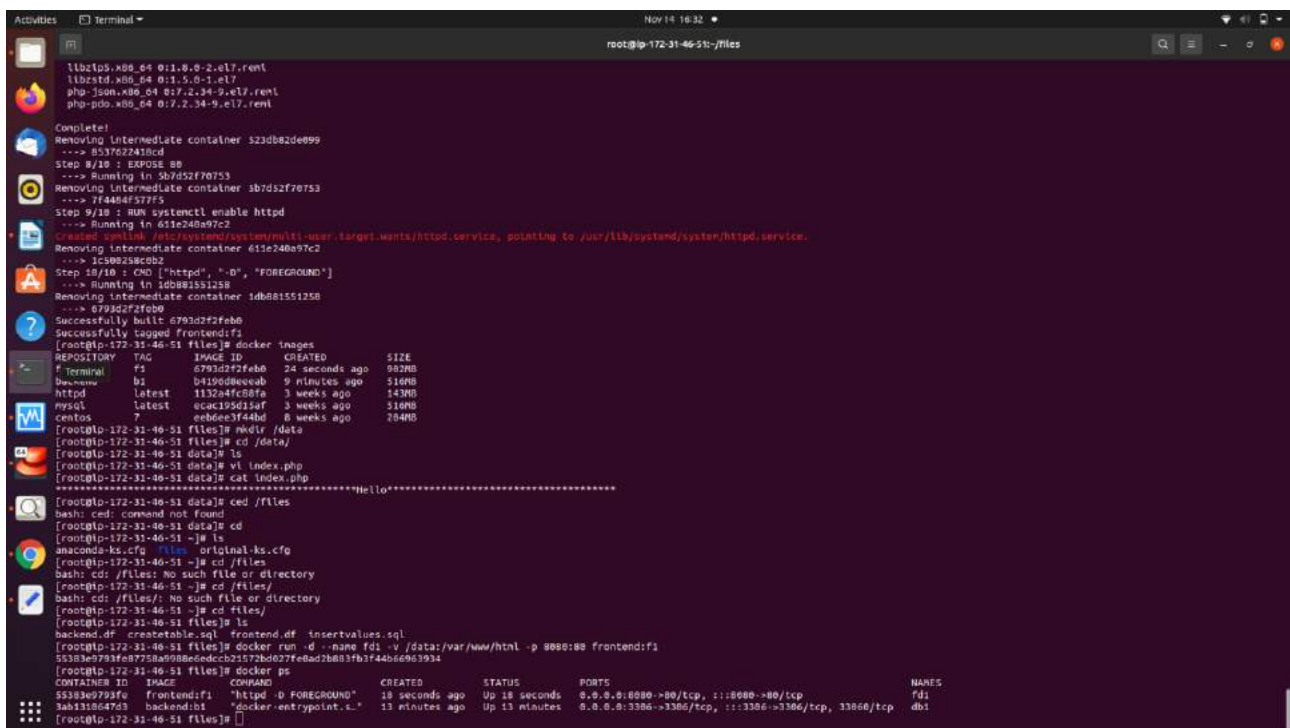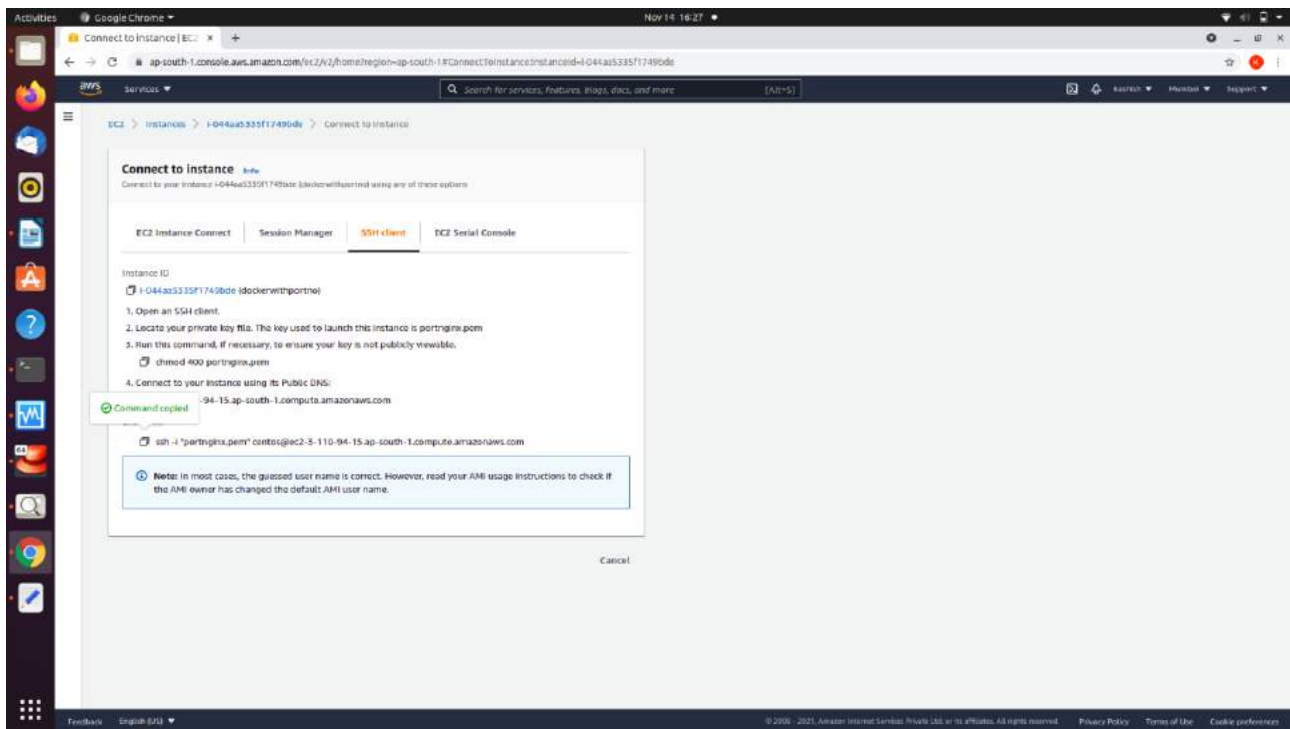
1   Mam,I am Using Kashish aws Account in all aws related account previously, that's why it is showing kashish name in place of akarsh as i already asked you mam.

Connect to instance | EC2 ×

ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#ConnectToInstance:instanceId=i-044aa5335f1749bde

Services ▼   Search for services, features, blogs, docs, and more   [Alt+S]   kashish ▼   Mumbai ▼   Support ▼

EC2 > Instances > i-044aa5335f1749bde > Connect to instance

Connect to instance Info

Connect to your instance i-044aa5335f1749bde (dockerwithportno) using any of these options

EC2 Instance Connect   Session Manager   **SSH client**   EC2 Serial Console

Instance ID

⬚ i-044aa5335f1749bde (dockerwithportno)

1. Open an SSH client.

2. Locate your private key file. The key used to launch this instance is portnginx.pem

3. Run this command, if necessary, to ensure your key is not publicly viewable.

   ⬚ chmod 400 portnginx.pem

4. Connect to your instance using its Public DNS:

   ⊘ Command copied   -94-15.ap-south-1.compute.amazonaws.com

   ⬚ ssh -i "portnginx.pem" centos@ec2-3-110-94-15.ap-south-1.compute.amazonaws.com

   ⓘ **Note:** In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

Cancel

---

root@ip-172-31-46-51:~/files

```
    libzip5.x86_64 0:1.8.0-2.el7.remi
    libzstd.x86_64 0:1.5.0-1.el7
    php-json.x86_64 0:7.2.34-9.el7.remi
    php-pdo.x86_64 0:7.2.34-9.el7.remi

Complete!
Removing intermediate container 523db82de899
 ---> 8537622418cd
Step 8/10 : EXPOSE 80
 ---> Running in 5b7d52f70753
Removing intermediate container 5b7d52f70753
 ---> 7f4484f577f5
Step 9/10 : RUN systemctl enable httpd
 ---> Running in 611e240a97c2
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service, pointing to /usr/lib/systemd/system/httpd.service.
Removing intermediate container 611e240a97c2
 ---> 1c508258c0b2
Step 10/10 : CMD ["httpd", "-D", "FOREGROUND"]
 ---> Running in 1db801551258
Removing intermediate container 1db801551258
 ---> 6793d2f2feb0
Successfully built 6793d2f2feb0
Successfully tagged frontend:f1
[root@ip-172-31-46-51 files]# docker images
REPOSITORY    TAG       IMAGE ID       CREATED         SIZE
f1            f1        6793d2f2feb0   24 seconds ago  982MB
backend       b1        b4190d0eeeab   9 minutes ago   516MB
httpd         latest    1132a4fc88fa   3 weeks ago     143MB
mysql         latest    ecac195d15af   3 weeks ago     516MB
centos        7         eeb6ee3f44bd   8 weeks ago     204MB
[root@ip-172-31-46-51 files]# mkdir /data
[root@ip-172-31-46-51 files]# cd /data/
[root@ip-172-31-46-51 data]# ls
[root@ip-172-31-46-51 data]# vi index.php
[root@ip-172-31-46-51 data]# cat index.php
******************************Hello*******************************
[root@ip-172-31-46-51 data]# ced /files
bash: ced: command not found
[root@ip-172-31-46-51 data]# cd
[root@ip-172-31-46-51 ~]# ls
anaconda-ks.cfg  files  original-ks.cfg
[root@ip-172-31-46-51 ~]# cd /files
bash: cd: /files: No such file or directory
[root@ip-172-31-46-51 ~]# cd /files/
bash: cd: /files/: No such file or directory
[root@ip-172-31-46-51 ~]# cd files/
[root@ip-172-31-46-51 files]# ls
backend.df  createtable.sql  frontend.df  insertvalues.sql
[root@ip-172-31-46-51 files]# docker run -d --name fd1 -v /data:/var/www/html -p 8080:80 frontend:f1
55383e0793fe087750a0980e6edccb21572bd027fe0ad2b803fb3f44b66963934
[root@ip-172-31-46-51 files]# docker ps
CONTAINER ID  IMAGE        COMMAND                 CREATED        STATUS        PORTS                                            NAMES
55383e0793fe  frontend:f1  "httpd -D FOREGROUND"   18 seconds ago Up 18 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp            fd1
3ab1318647d3  backend:b1   "docker-entrypoint.s…"  13 minutes ago Up 13 minutes 0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp  db1
[root@ip-172-31-46-51 files]#
```

root@ip-172-31-46-51:~/files

```
CMD [ "httpd", "-D", "FOREGROUND" ]

[root@ip-172-31-46-51 files]# cat backend.df
FROM mysql
ENV MYSQL_DATABASE prior
COPY ./createtable.sql /docker-entrypoint-initdb.d/
COPY ./insertvalues.sql /docker-entrypoint-initdb.d/

[root@ip-172-31-46-51 files]# docker ps
CONTAINER ID   IMAGE         COMMAND                  CREATED       STATUS          PORTS                                              NAMES
55383e9793fe   frontend:f1   "httpd -D FOREGROUND"    2 hours ago   Up 2 minutes    0.0.0.0:8888->80/tcp, :::8888->80/tcp               fd1
3ab1318647d3   backend:b1    "docker-entrypoint.s…"   2 hours ago   Up 11 minutes   0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp   db1
[root@ip-172-31-46-51 files]# docker rm -f fd1
fd1
[root@ip-172-31-46-51 files]# docker ps -
"docker ps" accepts no arguments.
See 'docker ps --help'.

Usage:  docker ps [OPTIONS]

List containers
[root@ip-172-31-46-51 files]# docker ps -a
CONTAINER ID   IMAGE         COMMAND                  CREATED           STATUS                     PORTS                                              NAMES
6f130ce59503   frontend:f1   "httpd -D FOREGROUND"    About an hour ago Exited (0) 2 minutes ago                                                      fd2
3ab1318647d3   backend:b1    "docker-entrypoint.s…"   2 hours ago       Up 12 minutes              0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp   db1
[root@ip-172-31-46-51 files]# docker rm -f fd2
fd2
[root@ip-172-31-46-51 files]# docker ps -a
CONTAINER ID   IMAGE         COMMAND                  CREATED       STATUS          PORTS                                              NAMES
3ab1318647d3   backend:b1    "docker-entrypoint.s…"   2 hours ago   Up 12 minutes   0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp   db1
[root@ip-172-31-46-51 files]# docker images
REPOSITORY   TAG      IMAGE ID       CREATED       SIZE
frontend     f1       6793d2f2feb0   2 hours ago   902MB
backend      b1       b419dd8eeeab   2 hours ago   516MB
httpd        latest   1132o4fc68fa   3 weeks ago   143MB
mysql        latest   ecac105d15af   3 weeks ago   516MB
centos       7        eeb6ee3f44bd   8 weeks ago   204MB
[root@ip-172-31-46-51 files]# docker run -d --name front -p 8081:80 frontend:f1
bc2711841ddaf7b46f3e92dd70c8321d0c31387249f0bd59495805e189a82712
[root@ip-172-31-46-51 files]# docker ps
CONTAINER ID   IMAGE         COMMAND                  CREATED         STATUS          PORTS                                              NAMES
bc2711841dda   frontend:f1   "httpd -D FOREGROUND"    4 seconds ago   Up 3 seconds    0.0.0.0:8081->80/tcp, :::8081->80/tcp               front
3ab1318647d3   backend:b1    "docker-entrypoint.s…"   2 hours ago     Up 13 minutes   0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp   db1
[root@ip-172-31-46-51 files]# docker exec -it front bash
[root@bc2711841dda /]# cd var
[root@bc2711841dda var]# ls
adm   cache  db  empty  games  gopher  kerberos  lib  local  lock  log  mail  nis  opt  preserve  run  spool  tmp  www  yp
[root@bc2711841dda var]# cd www
[root@bc2711841dda www]# ls
cgi-bin  html
[root@bc2711841dda www]# cd html
[root@bc2711841dda html]# ls
[root@bc2711841dda html]# vi index.php
[root@bc2711841dda html]# ls
index.php
[root@bc2711841dda html]# exit
```
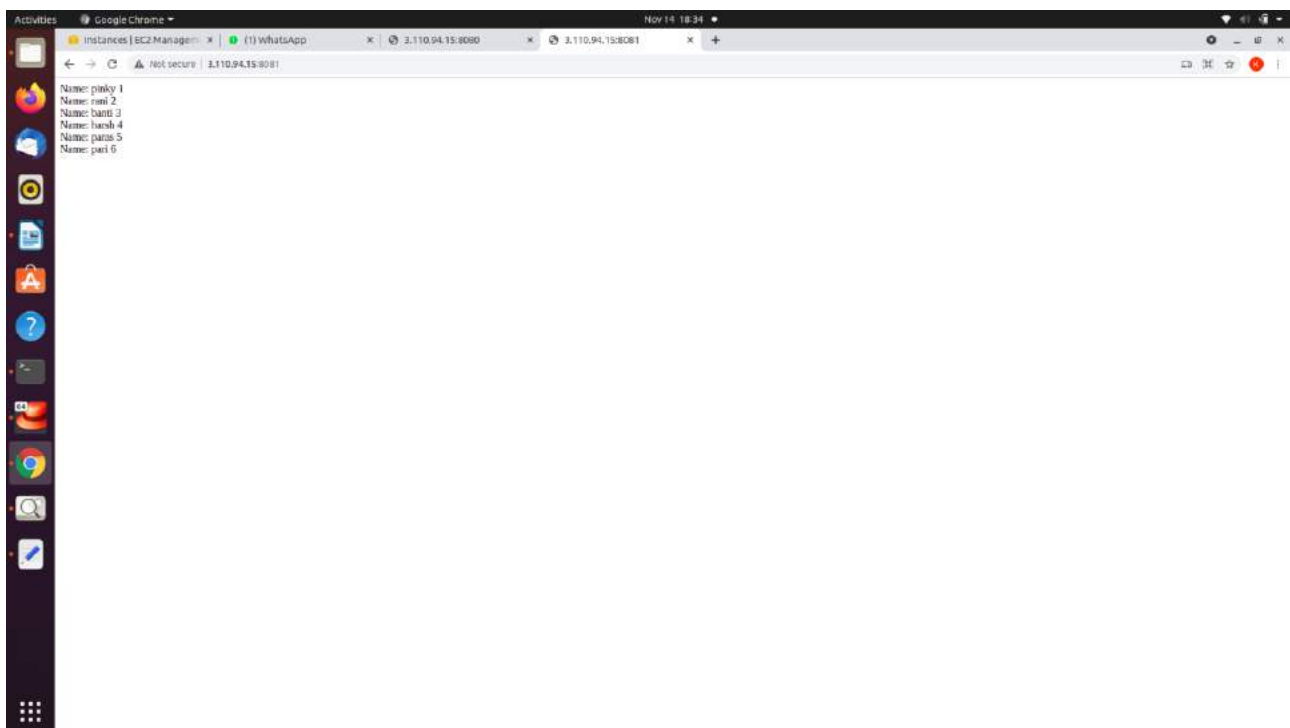
Instances | EC2 Managem × | (1) WhatsApp × 3.110.94.15:8080 × 3.110.94.15:8081 × +

← → C ⚠ Not secure | 3.110.94.15:8081

```
Name: pinky 1
Name: rani 2
Name: banti 3
Name: harsh 4
Name: paras 5
Name: pari 6
```

2

```
[root@master assessment]# vi pod1.yaml
[root@master assessment]# kubectl create -f pod1.yaml
pod/pod1 created
[root@master assessment]# vi pod2.yaml
[root@master assessment]# kubectl create -f pod2.yaml
pod/pod2 created
[root@master assessment]# kubectl get pods
NAME    READY    STATUS    RESTARTS    AGE
pod1    1/1      Running   0           93s
pod2    1/1      Running   0           20s
[root@master assessment]# kubectl get pod -o wide
NAME    READY    STATUS    RESTARTS    AGE    IP               NODE       NOMINATED NODE    READINESS GATES
pod1    1/1      Running   0           103s   192.168.189.69   worker2    <none>            <none>
pod2    1/1      Running   0           30s    192.168.189.70   worker2    <none>            <none>
[root@master assessment]# kubectl run pod3 --image=httpd
pod/pod3 created
[root@master assessment]# kubectl run pod4 --image=nginx
pod/pod4 created
[root@master assessment]# kubectl get pod -o wide
NAME    READY    STATUS    RESTARTS    AGE     IP                NODE       NOMINATED NODE    READINESS GATES
pod1    1/1      Running   0           2m47s   192.168.189.69    worker2    <none>            <none>
pod2    1/1      Running   0           94s     192.168.189.70    worker2    <none>            <none>
pod3    1/1      Running   0           21s     192.168.235.143   worker1    <none>            <none>
pod4    1/1      Running   0           9s      192.168.235.144   worker1    <none>            <none>
[root@master assessment]# kubectl create deployment dep1 --image=httpd
deployment.apps/dep1 created
[root@master assessment]# kubectl get deploy
NAME    READY    UP-TO-DATE    AVAILABLE    AGE
dep1    1/1      1             1            13s
[root@master assessment]# kubectl get pods
NAME                       READY    STATUS     RESTARTS    AGE
dep1-849f46f8bd-8c49b      1/1      Running    0           3m46s
pod1                       1/1      Running    0           15m
pod2                       1/1      Running    0           14m
pod3                       1/1      Running    0           13m
pod4                       1/1      Running    0           13m
[root@master assessment]# kubectl delete pod dep1-849f46f8bd-8c49b
pod "dep1-849f46f8bd-8c49b" deleted
[root@master assessment]# kubectl get pods
NAME                       READY    STATUS     RESTARTS    AGE
dep1-849f46f8bd-s7v7h      1/1      Running    0           12s
pod1                       1/1      Running    0           16m
pod2                       1/1      Running    0           15m
pod3                       1/1      Running    0           13m
pod4                       1/1      Running    0           13m
[root@master assessment]# kubectl delete pod dep1-849f46f8bd-s7v7h
pod "dep1-849f46f8bd-s7v7h" deleted
[root@master assessment]# kubectl get pods
NAME                       READY    STATUS     RESTARTS    AGE
dep1-849f46f8bd-srbnz      1/1      Running    0           8s
pod1                       1/1      Running    0           16m
pod2                       1/1      Running    0           15m
pod3                       1/1      Running    0           14m
pod4                       1/1      Running    0           14m
[root@master assessment]#
```

```
[root@master assessment]# vi dep2.yaml
[root@master assessment]# kubectl create -f dep2.yaml
deployment.apps/dep2 created
[root@master assessment]# kubectl get pods
NAME                        READY   STATUS    RESTARTS   AGE
dep1-849f46f8bd-25tqc       1/1     Running   0          94m
dep1-849f46f8bd-7r8gc       1/1     Running   0          92m
dep1-849f46f8bd-r8qff       1/1     Running   0          92m
dep1-849f46f8bd-srbnz       1/1     Running   0          98m
dep2-7b6794856f-fz628       2/2     Running   0          8s
pod1                        1/1     Running   0          115m
pod2                        1/1     Running   0          114m
pod3                        1/1     Running   0          113m
pod4                        1/1     Running   0          112m
[root@master assessment]# kubectl get deploy
NAME   READY   UP-TO-DATE   AVAILABLE   AGE
dep1   4/4     4            4           103m
dep2   1/1     1            1           23s
[root@master assessment]# kubectl delete pod dep2-7b6794856f-fz628
pod "dep2-7b6794856f-fz628" deleted
[root@master assessment]# kubectl get pods
NAME                        READY   STATUS    RESTARTS   AGE
dep1-849f46f8bd-25tqc       1/1     Running   0          96m
dep1-849f46f8bd-7r8gc       1/1     Running   0          95m
dep1-849f46f8bd-r8qff       1/1     Running   0          95m
dep1-849f46f8bd-srbnz       1/1     Running   0          101m
dep2-7b6794856f-qv5t5       2/2     Running   0          20s
pod1                        1/1     Running   0          118m
pod2                        1/1     Running   0          117m
pod3                        1/1     Running   0          115m
pod4                        1/1     Running   0          115m
[root@master assessment]#
```

```
[root@master assessment]# kubectl scale deployment/dep1 --replicas=2
deployment.apps/dep1 scaled
[root@master assessment]# kubectl get pods
NAME                        READY   STATUS    RESTARTS   AGE
dep1-849f46f8bd-25tqc       1/1     Running   0          63s
dep1-849f46f8bd-srbnz       1/1     Running   0          5m56s
pod1                        1/1     Running   0          22m
pod2                        1/1     Running   0          21m
pod3                        1/1     Running   0          20m
pod4                        1/1     Running   0          19m
[root@master assessment]# kubectl scale deployment /dep1 --replicas=4
error: there is no need to specify a resource type as a separate argument when passing arguments i
n resource/name form (e.g. 'kubectl get resource/<resource_name>' instead of 'kubectl get resource
 resource/<resource_name>'
[root@master assessment]# kubectl scale deployment/dep1 --replicas=4
deployment.apps/dep1 scaled
[root@master assessment]# kubectl get pods
NAME                        READY   STATUS             RESTARTS   AGE
dep1-849f46f8bd-25tqc       1/1     Running            0          96s
dep1-849f46f8bd-7r8gc       0/1     ContainerCreating  0          4s
dep1-849f46f8bd-r8qff       0/1     ContainerCreating  0          4s
dep1-849f46f8bd-srbnz       1/1     Running            0          6m29s
pod1                        1/1     Running            0          23m
pod2                        1/1     Running            0          21m
pod3                        1/1     Running            0          20m
pod4                        1/1     Running            0          20m
[root@master assessment]# kubectl get pods
NAME                        READY   STATUS    RESTARTS   AGE
dep1-849f46f8bd-25tqc       1/1     Running   0          3m10s
dep1-849f46f8bd-7r8gc       1/1     Running   0          98s
dep1-849f46f8bd-r8qff       1/1     Running   0          98s
dep1-849f46f8bd-srbnz       1/1     Running   0          8m3s
pod1                        1/1     Running   0          24m
pod2                        1/1     Running   0          23m
pod3                        1/1     Running   0          22m
pod4                        1/1     Running   0          21m
```
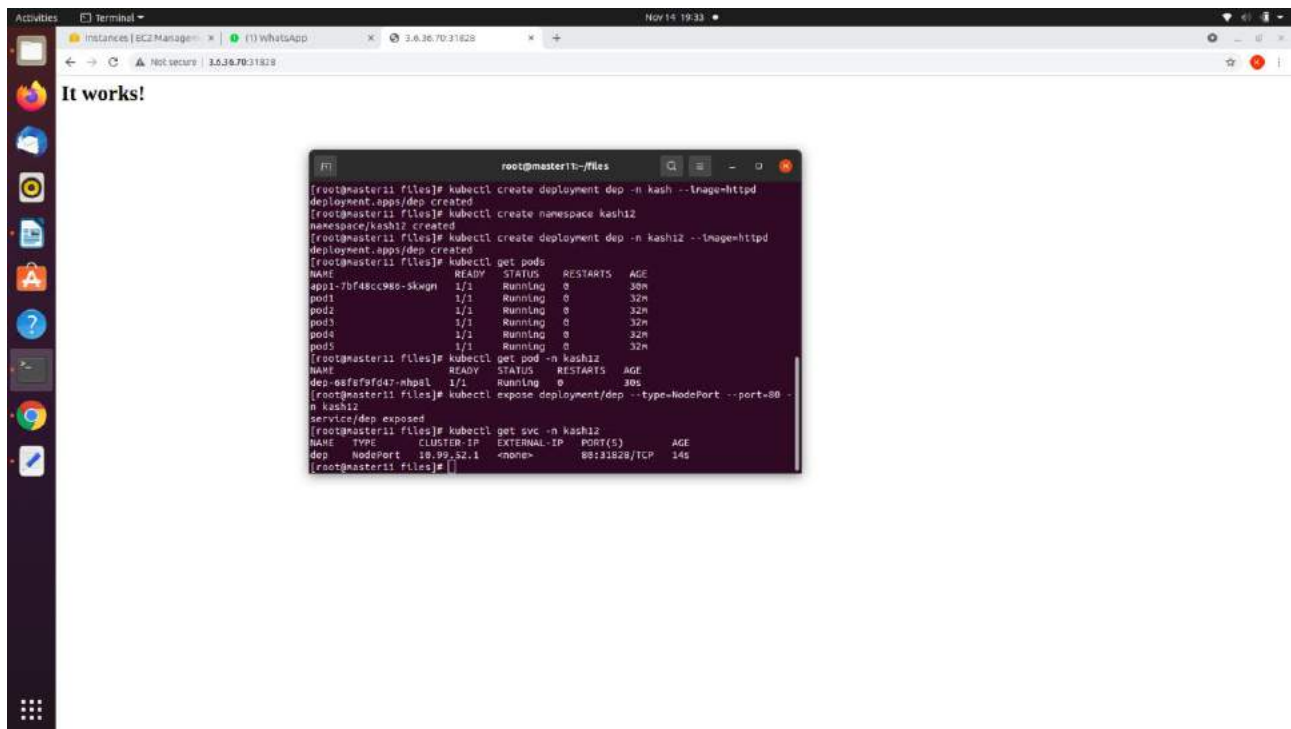
It works!

```
[root@master11 files]# kubectl create deployment dep -n kash --image=httpd
deployment.apps/dep created
[root@master11 files]# kubectl create namespace kash12
namespace/kash12 created
[root@master11 files]# kubectl create deployment dep -n kash12 --image=httpd
deployment.apps/dep created
[root@master11 files]# kubectl get pods
NAME                     READY   STATUS    RESTARTS   AGE
app1-7bf48cc986-5kwgm    1/1     Running   0          30m
pod1                     1/1     Running   0          32m
pod2                     1/1     Running   0          32m
pod3                     1/1     Running   0          32m
pod4                     1/1     Running   0          32m
pod5                     1/1     Running   0          32m
[root@master11 files]# kubectl get pod -n kash12
NAME                    READY   STATUS    RESTARTS   AGE
dep-68f8f9fd47-mhp8l    1/1     Running   0          30s
[root@master11 files]# kubectl expose deployment/dep --type=NodePort --port=80 -
n kash12
service/dep exposed
[root@master11 files]# kubectl get svc -n kash12
NAME    TYPE       CLUSTER-IP    EXTERNAL-IP   PORT(S)        AGE
dep     NodePort   10.99.52.1    <none>        80:31828/TCP   14s
[root@master11 files]#
```

3.

```
[root@ins1 assign]# LS
bash: LS: command not found
[root@ins1 assign]# ls
1.txt  2.txt  3.txt  4.java  5.doc
[root@ins1 assign]#
```