

Microsoft Whiteboard

→ ① interactive ✓

② Notes → ① u guys
② Google does

③ Labs
MOBAxtern ✓

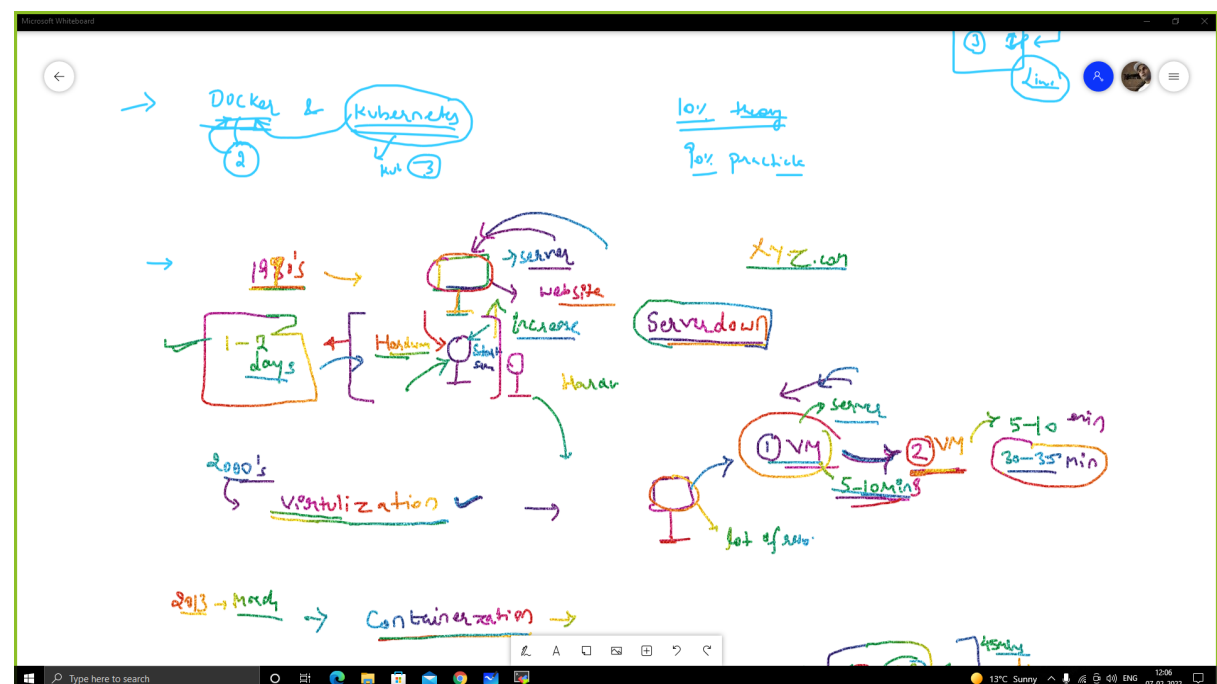
→ Docker & Kubernetes
② K8s ③

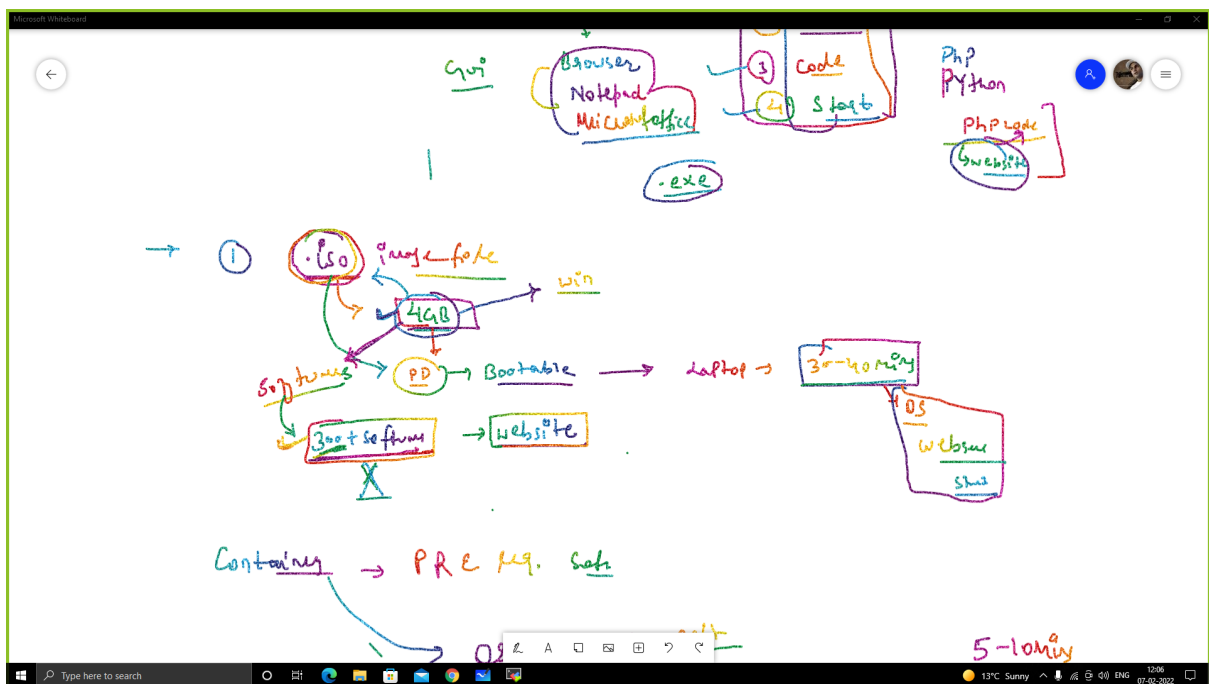
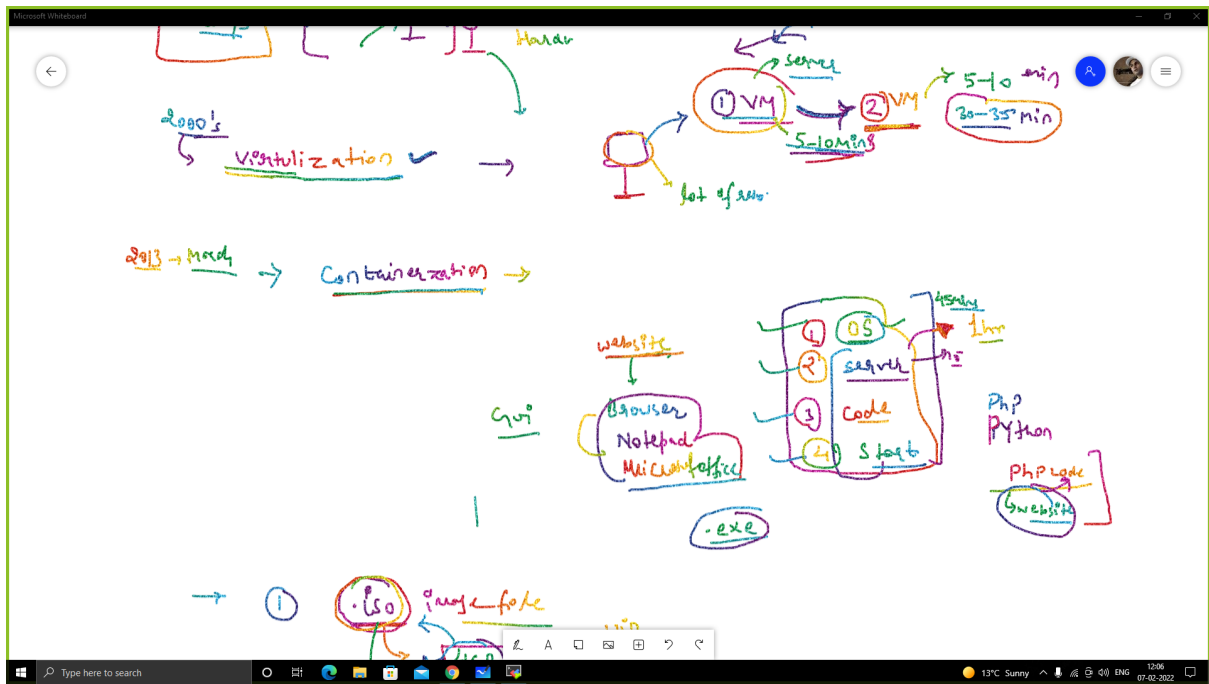
low theory
90% practice

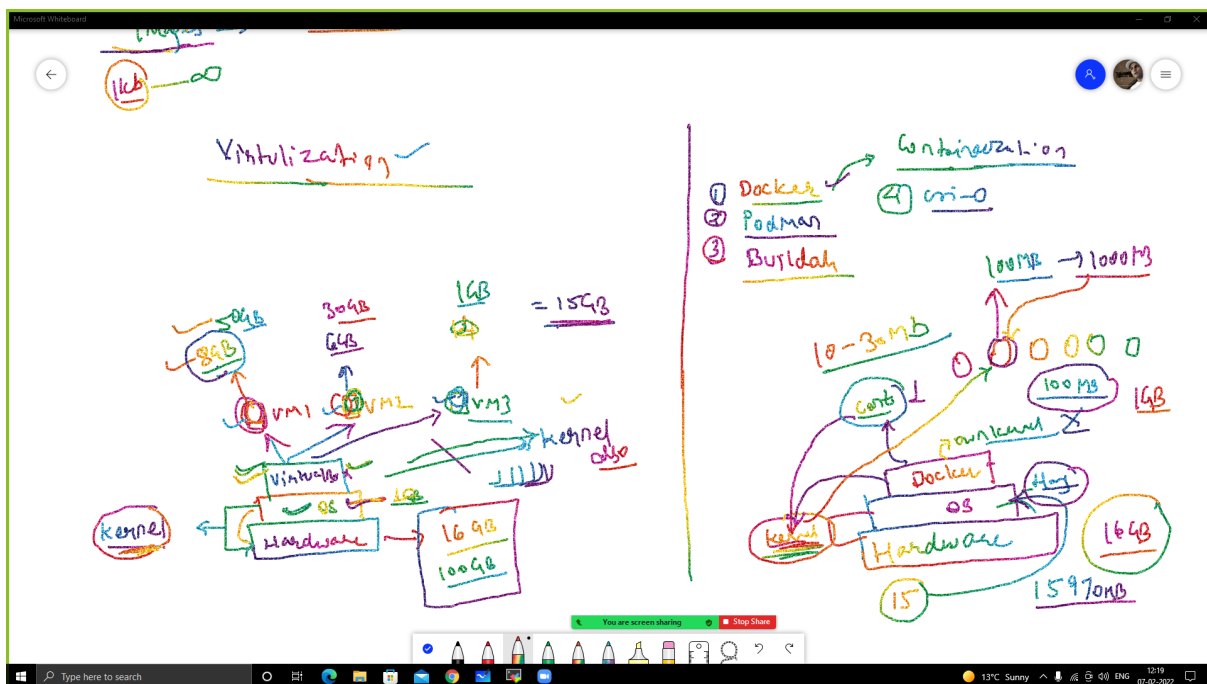
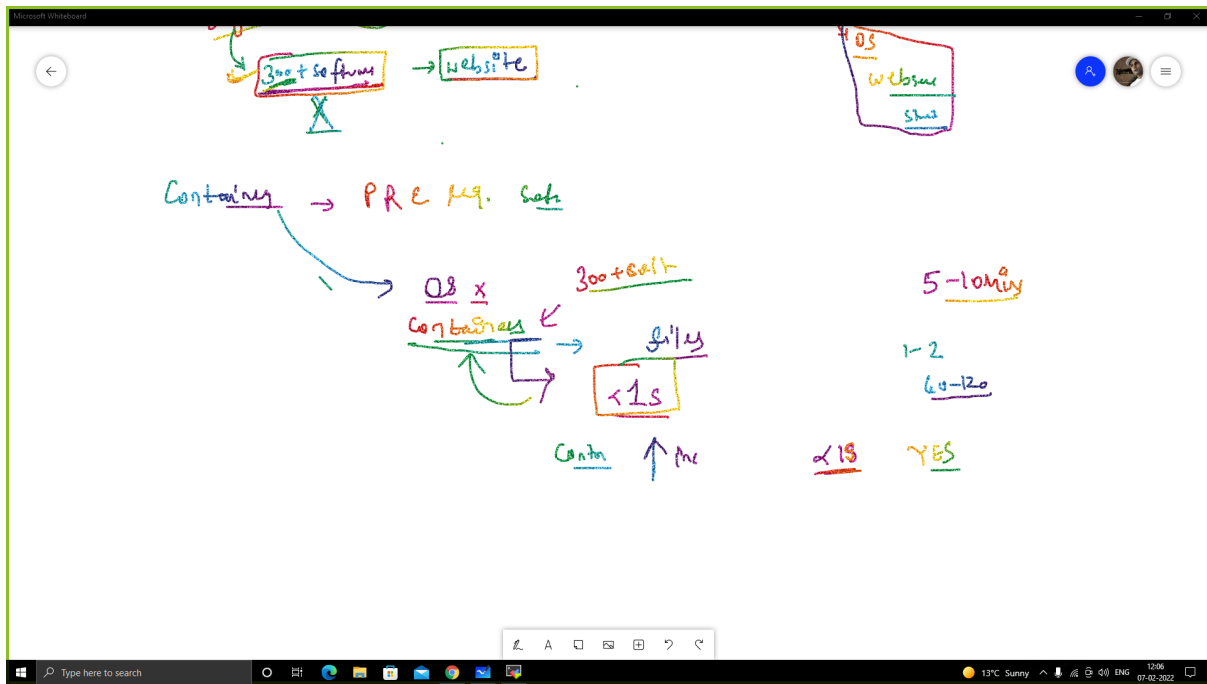
→ 1980's → sech → 1980's

Diagram on the right: A box containing ① US, ② Pay, ③ Live. Arrows indicate a cycle: ① US → ② Pay → ③ Live → ① US. A 'Live' label with an arrow points to the box.

Windows taskbar: Mute, Start Video, Security, Participants (21), Chat, Polls, New Share, Pause Share, Annotate, Remote Control, More. Status bar: 13°C Sunny, 07-03-2022, 12:05.







- 8 yum install docker -y
- 9 systemctl status docke
- 10 systemctl status docker
- 11 systemctl start docker
- 12 systemctl status docker
- 13 docker info

```
14 uname -r
15 docker info | grep -i kernel
16 free -m
17 docker info
18 history
```

Task : 1

Q.1 install docker and start the service

Q.2 check docker info command and verify when the docker is using the same kernel version or not

Q.3 find out from google – how to download docker image

```
8 docker search ubuntu
9 docker pull ubuntu
10 docker images
11 docker pull hello-world
12 docker images
13 docker run hello-world
14 docker ps
15 docker ps -a
16 docker run ubuntu
17 docker ps -a
18 docker run -it ubuntu
19 docker ps
20 docker ps -a
21 docker start stupefied_faraday
22 docker ps
23 docker run -it --name mayank ubuntu
24 docker ps
25 docker ps -a
26 docker rename stupefied_faraday oracle
27 docker ps -a
```

```
22 docker ps
23 docker run -it --name mayank ubuntu
24 docker ps
25 docker ps -a
26 docker rename stupefied_faraday oracle
27 docker ps -a
28 history
29 ip a
```

```
30 yum install httpd -y
31 cd /var/www/html/
33 vi index.html
34 systemctl start httpd
35 history
```

```
7 pwd
8 docker search ubuntu
9 docker pull ubuntu
10 docker images
11 docker pull hello-world
12 docker images
13 docker run hello-world
14 docker ps
15 docker ps -a
16 docker run ubuntu
17 docker ps -a
18 docker run -it ubuntu
19 docker ps
20 docker ps -a
21 docker start stupefied_faraday
22 docker ps
23 docker run -it --name mayank ubuntu
24 docker ps
25 docker ps -a
26 docker rename stupefied_faraday oracle
27 docker ps -a
28 history
29 ip a
30 yum install httpd -y
31 cd /var/www/html/
32 vi index.html
33 vi index.html
34 systemctl start httpd
35 history
36 curl ifconfig.me
37 cd
38 curl 3.221.149.42
39 docker run -it centos
40 docker run -it --name webapp debian
41 docker ps -a
42 history
```

Q.1 try to download images from docker hub

```
Ubuntu
Centos
Hello-world
mdhack/myserver
mdhack/myapache
```

Q.2 create a container using every image and u should need to give an container name to every container

Q.3 create a new container named as test1 using debian image and configur apache server inside that.

```
Apt update && apt install apache2
```

```
Cd /var/www/html/
Echo code > /var/www/html/index.html
Service apache2 start
```

```
39 docker run -it centos
40 docker run -it --name webapp debian
41 docker ps -a
42 history
43 docker ps
44 docker ps -a
45 docker start webapp
46 docker ps -a
47 docker ps
48 docker attach webapp
49 docker ps
50 docker ps -a
51 docker start webapp
52 docker ps
53 docker exec -it webapp date
54 docker exec -it webapp cal
55 docker exec -it webapp ls
56 docker exec -it webapp bash
57 docker ps
58 docker inspect webapp
```

```
38 curl 3.221.149.42
39 docker run -it centos
40 docker run -it --name webapp debian
41 docker ps -a
42 history
43 docker ps
44 docker ps -a
45 docker start webapp
46 docker ps -a
47 docker ps
48 docker attach webapp
49 docker ps
50 docker ps -a
51 docker start webapp
52 docker ps
53 docker exec -it webapp date
54 docker exec -it webapp cal
55 docker exec -it webapp ls
56 docker exec -it webapp bash
57 docker ps
58 docker inspect webapp
59 history
60 docker run -it --name test2 -p 3333:80 debian
61 docker run -it --name oracleapache -p 3334:80 oraclelinux:8.3
62 docker run -it --name oracleapache -p 3335:80 httpd
63 docker run -it --name oracleapache2 -p 3336:80 httpd
64 docker ps
65 docker ps -a
66 docker run -it --name nginx -p 3337:80 nginx
67 docker run -itd --name myserver -p 3338:80 mdhack/myserver
68 docker run -itd --name myserver1 -p 3339:80 mdhack/myapache
```

→ Any server

→ Simple steps

- ① Installation of correct package
- ② Conf/ Index.html
- ③ Starting the service

IP address

Private
Public

172.39.0.174

① 112.113.114 ✓
0-255

② X 222.233.244.266 X
0-255

③ 10.x.x.x
172.16.x.x to 172.31.x.x
192.168.x.x

Port No.

13°C Sunny 16:28 07-02-2022

172.39.0.174

① 112.113.114 ✓
0-255

② X 222.233.244.266 X
0-255

③ 10.x.x.x
172.16.x.x to 172.31.x.x
192.168.x.x

Port No.

create Apache

Public
Private IP

if it is work

HTTP → 80
HTTPS → 443
SSH → 22
FTP → 21
AFS
DNS → 53

IP add

Service Port No.

2¹⁶ = 65536

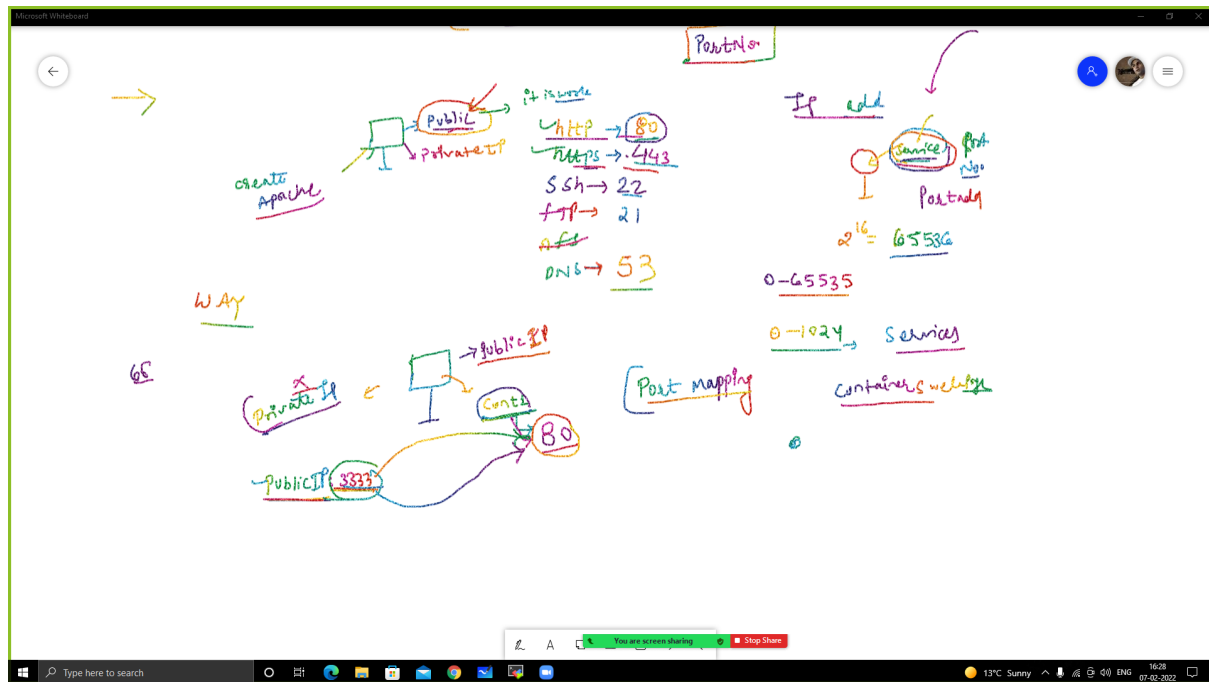
0-65535

0-1024 → Services

Way

65

13°C Sunny 16:28 07-02-2022



Q.1 create a container using oraclelinux:8.3 image and configure apache inside into it and come out from the container and then use exec command to go inside into the container

name should be task1

Q.2 create a container using same image as above and expose it on 3333 port no. and configure apache into it so u can verify from ur browser whether it is working or not name should be task2

Q.3 CREATE A CONTAINER using httpd image and expose it on port no. 3334 name should be task3

Q.4 CREATE A CONTAINER using nginx image and expose it on port no. 3335 name should be task4

Q.5 CREATE A CONTAINER using mdhacker/myapache image and expose it on port no. 3336 name should be task5

Q.6 CREATE A CONTAINER using mdhacker/mysqlserver image and expose it on port no. 3336 name should be task5