

P1:

```
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker run -v nginx_html:/usr/share/nginx/html -v nginx_conf:/etc/nginx/conf.d -d
-p 8080:80 nginx
5cc04378c26411654e4b1a6e7836ebec84f0b9aef0cfff242fe54dae00cb5784f
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker volume ls
DRIVER      VOLUME NAME
local       6e904da68ae7cc260784a89f76f91ac1c4f5fb93ef928373edff2dd6d442b26c
local       nginx_conf
local       nginx_html
local       nginx_xonf

ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                               NAMES
3646fa49a3b9   nginx    "/docker-entrypoint. ...."   3 minutes ago   Up 3 minutes   0.0.0.0:8080->80/tcp, [::]:8080->80/tcp   optimi
stic_ptolemy
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker rm -f 3646fa49a3b9
3646fa49a3b9
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker run -v nginx_html:/usr/share/nginx/html -v nginx_conf:/etc/nginx/conf.d -d
-p 8080:80 nginx
254052785ebccd2cc7d50e5e84745513208b34d7ddacbeca22c15c4f59d4e6d
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ curl localhost:8080
hello world
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$
```

P2:

```
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker run -v ~/Desktop/nginx_html:/usr/share/nginx/html -v ~/Desktop/nginx_conf:
/etc/nginx/conf.d -d nginx
f96adfdc624fb0652ea3e8d86b1ab0a0bdc013b73003ba4ebec26e749e51d069
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS      NAMES
f96adfdc624f   nginx    "/docker-entrypoint. ...."   18 seconds ago   Up 16 seconds   80/tcp     tender_mayer

ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker run -v ~/Desktop/nginx_html:/usr/share/nginx/html -v ~/Desktop/nginx_conf:
/etc/nginx/conf.d -d -p 8080:80 nginx
d2a2c108467b099d25a4bd3d42c222fa1dfc9898c3a1fcb71a3152457f9b2cb3
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ curl localhost:8080
hello world
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$
```

P3:

```
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker run -p 8001:80 -d nginx
1d8ea873eb2cdbc5147c51525e6e03e0585fc97ca2d5ab8d284b9f64ff6861f
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker run -p 8002:80 -d nginx
4813f2f4fc43317cfdd687058eed55bbafdd92cb7916e662034168db583d6ccf
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAME
4813f2f4fc43	nginx	"/docker-entrypoint...."	9 seconds ago	Up 9 seconds	0.0.0.0:8002->80/tcp, [::]:8002->80/tcp	keen
1d8ea873eb2c	nginx	"/docker-entrypoint...."	16 seconds ago	Up 15 seconds	0.0.0.0:8001->80/tcp, [::]:8001->80/tcp	stoi
254052785ebe	nginx	"/docker-entrypoint...."	22 minutes ago	Up 22 minutes	0.0.0.0:8080->80/tcp, [::]:8080->80/tcp	cran

```
ahmed@ahmed-HP-EliteBook-840-G5:~/Desktop$ sudo docker exec -it 1d8ea873eb2c bash
root@1d8ea873eb2c:/# curl http://localhost:80
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
body { width: 35em; margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif; }
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
</body>
</html>
root@1d8ea873eb2c:/#
```

P4:

The screenshot shows the Visual Studio Code interface with a file explorer on the left containing 'compose.yml' and 'lab2.pdf'. The main editor displays the 'compose.yml' file with the following content:

```
1 services:
2   mysql:
3     image: mysql:latest
4     environment:
5       MYSQL_ROOT_PASSWORD: 123456
6       MYSQL_DATABASE: db
7       MYSQL_USER: osos
8       MYSQL_PASSWORD: 123
9     ports:
10      - "3306:3306"
11
12   nginx:
13     image: nginx:latest
14     ports:
15      - "80:80"
16     depends_on:
17      - mysql
```

The bottom panel shows the terminal output for the command 'docker compose up -d':

```
ahmed@ahmed-HP-EliteBook-840-G5:/media/ahmed/B626A91C26A8DE9D/ITI/iti-fullstack/Docker/Day-2/Lab$ sudo
docker compose up -d
[+] Running 2/2
✔ Container lab-mysql-1 Started 0.5s
✔ Container lab-nginx-1 Started 0.4s
ahmed@ahmed-HP-EliteBook-840-G5:/media/ahmed/B626A91C26A8DE9D/ITI/iti-fullstack/Docker/Day-2/Lab$
```