Lab

- P1: Create your own nginx docker image based on ubuntu “NEVER USE FROM nginx”
  - Install nginx
  - copy index.html as file to "/usr/share/nginx/html” with message “”
  - Start nginx
  - Expose port
  - Docker push to your register on dockerhub
- P2: What is the rest of Docker Networks ? “Name and Definition”
- P3: Create your bridge network, two containers from ubuntu image with different names and try to ping each other using NAME.

Lab

- 1- create Dockerfile to create nginx , replace override index.html of nginx with content “ Hello ITI heros from Dockerfile”

```
FROM nginx

COPY index.html /usr/share/nginx/html/
```

- 2-repeate previous task without using NGINX as a base , use ubuntu

```
FROM ubuntu

RUN apt update && apt install -y nginx

#COPY index.html /usr/share/nginx/html/


# in 2019 there is an edit in nginx

COPY index.html  /var/www/html/
#CMD ["service","nginx","start"]

CMD ["nginx", "-g", "daemon off;"]
```

Lab

- 3- create cutom nginx image "DON'T USE NGINX AS BASE" with the following needs :
  - Create Dockerfile with name **Dockerfile9090**
  - Dockerfile will have the following steps :
    - Use **alpine** as your Base
    - Run following commands " **apk update**. **,AND** **apk add nginx**"
    - Create Directory called **/data**
    - **Compress the file index.html to index.html.tar.gz**
    - Copy **index.html.tar.gz** file to **/data**
    - Copy the **nginx-9090.conf** file to **/etc/nginx/http.d/**
    - Expose port **9090**
    - Use command to start the image ➔ **nginx -g daemon off;**
  - Tag image with **nginx9090**
  - Image run container in background with name nginx-container-9090 and can listen from outside on port 8080

nginx-9090.conf

```
server {
        listen 9090;

        server_name example.com;
        index index.html;

        location / {
           root /data;
        }
}
```

Index.html

```
<p> Hello , ITI heroes . This nginx listen on port 9090 </p>
```

Cat **Dockerfile9090**

```
FROM alpine

RUN apk update && apk add nginx

WORKDIR /data

ADD index.html.tar.gz /data

COPY nginx-9090.conf  /etc/nginx/http.d/

EXPOSE 9090

CMD ["nginx", "-g", "daemon off;"]
```

```
$ tar -czvf index.html.tar.gz index.html
$ docker build -t nginx9090 -f Dockerfile.9090 .
$ docker run -d -p 8080:9090 --name nginx-container nginx9090
```