Task 1: Using bridge networking

- Reference: https://docs.docker.com/network/network-tutorial-standalone/
- Practice using multiple bridge network:
 - + Create 2 bridges
 - + Create 2 containers on each bridge and test the connection between 2 containers

Task 2: Using host networking

- Reference: https://docs.docker.com/network/network-tutorial-host/

Task 3: Using overlay networking

- Reference: https://docs.docker.com/network/network-tutorial-overlay/

Task 4: Using macvlan networking

- Reference: https://docs.docker.com/network/network-tutorial-macvlan/

Task 1: Create network

```
thuongbv@thuongbv-desktop:-$ docker network create --driver bridge bridge_network_1
cc3f4a2a5afaef122faf7e310533e8ccbbe9147264d8ee6311f6e3820114aaac
thuongbv@thuongbv-desktop:~$ docker network create --driver bridge bridge_network_2
1e16dfb2235c2d37f09a250b9d205d9634dba999abdc7dd462b6aa7b4a974826
thuongbv@thuongbv-desktop:~$ docker network ls
NETWORK ID
               NAME
                                             SCOPE
                                   DRIVER
2623a122f06e
               bridge
                                   bridge
                                             local
cc3f4a2a5afa
               bridge_network_1
                                   bridge
                                             local
1e16dfb2235c
               bridge_network_2
                                   bridge
                                             local
1efef8a711ae
               host
                                   host
                                             local
1d91e0ace88e
                                   null
                                             local
               none
```

Create container

```
thuongbv@thuongbv-desktop:~$ docker run -dit --name alpine1 --network bridge_network_1 alpine ash
3d0cc5d4543d9fbbcd48caf5acb598c5b973a1e75d1a4788e7c2c36ea78b054b
thuongbv@thuongbv-desktop:-$ docker run -dit --name alpine2 --network bridge_network_2 alpine ash
1cb2c029adca397288a07b3e17da7315559f20b3de1b8e10aeb09992d8ce7da6
thuongbv@thuongbv-desktop:~$ docker container ls
                                   CREATED
CONTAINER ID
               IMAGE
                         COMMAND
                                                                     PORTS
1cb2c029adca
                         "ash"
               alpine
                                   11 seconds ago
                                                     Up 10 seconds
                                                                               alpine2
                                                     Up 18 seconds
3d0cc5d4543d
               alpine
                         "ash"
                                   19 seconds ago
                                                                               alpine1
```

Test connect

```
thuongbv@thuongbv-desktop:-$ docker container ls -a

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
1cb2c029adca alpine "ash" 3 minutes ago Up 3 minutes alpine2
3d0cc5d4543d alpine "ash" 3 minutes ago Exited (1) 26 seconds ago alpine1

thuongbv@thuongbv-desktop:-$ docker restart 3d
3d

thuongbv@thuongbv-desktop:-$ docker container attach apline1

Error response from daemon: No such container: apline1

thuongbv@thuongbv-desktop:-$ docker container attach alpine1

/ # docker ping -c 2 alpine2
ash: docker: not found

/ # ping -c 2 alpine2
ping: bad address 'alpine2'

/ #

/ # ping -c 2 1c
ping: bad address '1c'

/ # # # Ping -c 2 1c
```

Task2:

(i) localhost

Welcome to nginx!

For online documentation and support please refer to $\underline{nginx.org}$. Commercial support is available at $\underline{nginx.com}$.

Thank you for using nginx.