Exercise 11.2: Create a new static route

Creating and testing routing is always best done on two or more systems. If a second system is available whether it be a physical,virtual or container,it will be known as the **other** system. The goal of this lab is to create aliases on different networks and be able to ping the other system's address.
Create an IP alias on each system. The addresses should be on separate subnets, and require a specific route:

- On your system use the address `172.16.X.100`
- On the other system use the address `192.168.Y.100`

Where X and Y are unique to the lab/classroom.

```
# ip addr add <ADDRESS>/24 dev eth0
```

Solution 11.2

1. Create a static route configuration:
   - On **CentOS**, create or edit the file
     `/etc/sysconfig/network-scripts/route-<INTERFACE>`
     and add the following content:
     - On your system:
       ```
       192.168.Y.0/24 via <ADDR-Y> dev <INTERFACE>
       172.16.Y.0/24 via <ADDR-Y> dev <INTERFACE>
       ```
       NOTE: <ADDR-Y> is the original public IP address of the interface.
     - On the other system:
       ```
       192.168.X.0/24 via <ADDR-X> dev <INTERFACE>
       172.16.X.0/24 via <ADDR-X> dev <INTERFACE>
       ```
       NOTE: <ADDR-X> is the original public IP address of the interface.
   - On **OpenSUSE**, create or edit the file:
     `/etc/sysconfig/network/ifroute-<INTERFACE>`
     and add the following content:
     - On your system:
       ```
       192.168.Y.0/24 <ADDR-Y> - <INTERFACE>
       172.16.Y.0/24 <ADDR-Y> - <INTERFACE>
       ```
     - On the other system:
       ```
       192.168.X.0/24 <ADDR-X> - <INTERFACE>
       172.16.X.0/24 <ADDR-X> - <INTERFACE>
       ```
   - On **Ubuntu**, edit the file `/etc/network/interfaces` and in the stanza for <INTERFACE add the following lines: (should fit on two lines)

- On your system:

```
up route add -net 192.168.Y.0/24 gw <ADDR-Y> dev <INTERFACE>
up route add -net 172.16.Y.0/24 gw <ADDR-Y> dev <INTERFACE>
```

- On the other system:

```
up route add -net 192.168.X.0/24 gw <ADDR-X> dev <INTERFACE>
up route add -net 172.16.X.0/24 gw <ADDR-X> dev <INTERFACE>
```

2. Restart the network:

```
# systemctl restart network
```

3. Ping the remote address:

- On your system:

```
$ ping 192.168.Y.100 ping 172.16.Y.100
```

- On the other system:

```
$ ping 192.168.X.100 ping 172.16.X.100
```

