

Assignment 11-Basic Network and Configuration

Task A

1.

```
(jaiden@kali)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    ether 08:00:27:0f:7e:8e txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.3.15 netmask 255.255.255.0 broadcast 10.0.3.255
    inet6 fe80::a00:27ff:fed8:8eb8 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:d8:8e:b8 txqueuelen 1000 (Ethernet)
    RX packets 1 bytes 590 (590.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 23 bytes 3070 (2.9 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 4 bytes 240 (240.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
```

2.

```
(jaiden@kali)-[~]
$ route
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
default 10.0.3.2 0.0.0.0 UG 100 0 0 eth1
10.0.3.0 0.0.0.0 255.255.255.0 U 100 0 0 eth1
```

3.

```
(jaiden@kali)-[~]
$ netstat -t
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
```

4.

```
(jaiden@kali)-[~]
$ host odu.edu
odu.edu has address 35.170.140.174
odu.edu mail is handled by 10 odu-edu.mail.protection.outlook.com.
```

5.

```

(jaiden@kali)-[~]
$ ping -c 10 ubuntu.com
PING ubuntu.com (185.125.190.29) 56(84) bytes of data.
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=1 ttl=46 time=116 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=2 ttl=46 time=111 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=3 ttl=46 time=134 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=4 ttl=46 time=155 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=5 ttl=46 time=153 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=6 ttl=46 time=141 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=7 ttl=46 time=162 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=8 ttl=46 time=179 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=9 ttl=46 time=198 ms
64 bytes from website-content-cache-3.ps5.canonical.com (185.125.190.29): icmp_s
eq=10 ttl=46 time=206 ms

— ubuntu.com ping statistics —
10 packets transmitted, 10 received, 0% packet loss, time 9125ms
rtt min/avg/max/mdev = 111.445/155.475/205.702/30.207 ms

```

6.

```

(jaiden@kali)-[~]
$ cat /etc/hostname
kali

```

7.

```

(jaiden@kali)-[~]
$ cat /etc/resolv.conf
# Generated by NetworkManager
search wlan.odu.edu
nameserver 128.82.95.20

```

8.

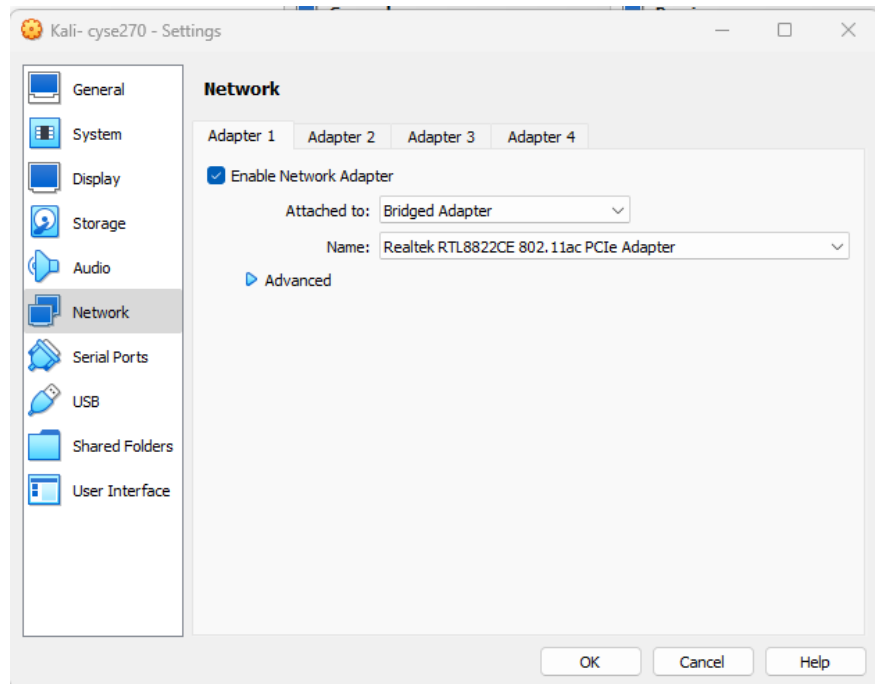
```

(jaiden@jmcco031)-[~]
$ cat /etc/hostname
jmcco031

```

Task B

1.



2.

a)

```

(jaiden@jmcco031)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    ether 08:00:27:0f:7e:8e txqueuelen 1000 (Ethernet)
    RX packets 1 bytes 60 (60.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.3.15 netmask 255.255.255.0 broadcast 10.0.3.255
    inet6 fe80::a00:27ff:fed8:8eb8 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:d8:8e:b8 txqueuelen 1000 (Ethernet)
    RX packets 1 bytes 590 (590.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 20 bytes 2888 (2.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 4 bytes 240 (240.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4 bytes 240 (240.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```

There is no difference between the two

b)

```

(jaiden@jmcco031)-[~]
$ route
Kernel IP routing table
Destination    Gateway         Genmask         Flags Metric Ref    Use Iface
default        10.0.3.2        0.0.0.0         UG    100    0      0 eth1
10.0.3.0       0.0.0.0         255.255.255.0   U     100    0      0 eth1

```

There is no difference between the two

c)

```

(jaiden@jmcco031)-[~]
$ netstat -t
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State

```

There is no difference between the two

d)

```

(jaiden@jmcco031)-[~]
$ host odu.edu
odu.edu has address 35.170.140.174
odu.edu mail is handled by 10 odu-edu.mail.protection.outlook.com.

```

There is no difference between the two

e)

```

(jaiden@jmcco031)-[~]
$ ping -c 10 ubuntu.com
PING ubuntu.com (185.125.190.20) 56(84) bytes of data.
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=1 ttl=49 time=81.6 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=2 ttl=49 time=82.4 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=3 ttl=49 time=82.8 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=4 ttl=49 time=82.6 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=5 ttl=49 time=81.9 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=6 ttl=49 time=82.2 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=7 ttl=49 time=82.1 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=8 ttl=49 time=82.6 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=9 ttl=49 time=82.2 ms
64 bytes from website-content-cache-1.ps5.canonical.com (185.125.190.20): icmp_s
eq=10 ttl=49 time=81.7 ms

— ubuntu.com ping statistics —
10 packets transmitted, 10 received, 0% packet loss, time 9008ms
rtt min/avg/max/mdev = 81.555/82.197/82.767/0.381 ms

```

The difference between the two is that the ttl number and the times are different.

f)

```

(jaiden@jmcco031)-[~]
$ cat /etc/hostname
jmcco031

```

The difference is the hostname

g)

```

(jaiden@jmcco031)-[~]
$ cat /etc/resolv.conf
# Generated by NetworkManager
search wlan.odu.edu
nameserver 128.82.95.20

```

There is no difference between the two