

Modify the `/etc/hosts` file in all three VMs to assign each of your VM's IP address with a hostname.

```
cs213@ldap: ~  
GNU nano 4.8 /etc/hosts  
127.0.0.1 localhost  
127.0.1.1 ubuntu  
  
192.168.13.11 ldap.cosc328.okc ldap  
192.168.13.22 vm2.cosc328.okc vm2  
192.168.13.33 kali.cosc328.okc kali  
  
# The following lines are desirable for IPv6 capable hosts  
::1 ip6-localhost ip6-loopback  
fe00::0 ip6-localnet  
ff00::0 ip6-mcastprefix  
ff02::1 ip6-allnodes  
ff02::2 ip6-allrouters
```

```
cs213@vm2: ~  
GNU nano 4.8 /etc/hosts  
127.0.0.1 localhost  
127.0.1.1 ubuntu  
  
192.168.13.11 ldap.cosc328.okc ldap  
192.168.13.22 vm2.cosc328.okc vm2  
192.168.13.33 kali.cosc328.okc kali  
  
# The following lines are desirable for IPv6 capable hosts  
::1 ip6-localhost ip6-loopback  
fe00::0 ip6-localnet  
ff00::0 ip6-mcastprefix  
ff02::1 ip6-allnodes  
ff02::2 ip6-allrouters
```

```
kali@kali: ~  
File Actions Edit View Help  
GNU nano 7.2 /etc/hosts  
127.0.0.1 localhost  
127.0.1.1 kali  
  
192.168.13.11 ldap.cosc328.okc ldap  
192.168.13.22 vm2.cosc328.okc vm2  
192.168.13.33 kali.cosc328.okc kali  
  
::1 localhost ip6-localhost ip6-loopback  
ff02::1 ip6-allnodes  
ff02::2 ip6-allrouters
```

Make sure that all three VMs can connect each other by their respective hostnames:

```
cs213@ldap: ~  
cs213@ldap:~$ ping -c 3 vm2.cosc328.okc  
PING vm2.cosc328.okc (192.168.13.22) 56(84) bytes of data.  
64 bytes from vm2.cosc328.okc (192.168.13.22): icmp_seq=1 ttl=64 time=0.377 ms  
64 bytes from vm2.cosc328.okc (192.168.13.22): icmp_seq=2 ttl=64 time=0.385 ms  
64 bytes from vm2.cosc328.okc (192.168.13.22): icmp_seq=3 ttl=64 time=0.699 ms  
  
--- vm2.cosc328.okc ping statistics ---  
3 packets transmitted, 3 received, 0% packet loss, time 2043ms  
rtt min/avg/max/mdev = 0.377/0.487/0.699/0.149 ms  
cs213@ldap:~$ ping -c 3 kali.cosc328.okc  
PING kali.cosc328.okc (192.168.13.33) 56(84) bytes of data.  
64 bytes from kali.cosc328.okc (192.168.13.33): icmp_seq=1 ttl=64 time=0.638 ms  
64 bytes from kali.cosc328.okc (192.168.13.33): icmp_seq=2 ttl=64 time=0.457 ms  
64 bytes from kali.cosc328.okc (192.168.13.33): icmp_seq=3 ttl=64 time=0.410 ms  
  
--- kali.cosc328.okc ping statistics ---  
3 packets transmitted, 3 received, 0% packet loss, time 2035ms  
rtt min/avg/max/mdev = 0.410/0.501/0.638/0.098 ms  
cs213@ldap:~$
```

```
cs213@vm2: ~  
cs213@vm2:~$ ping -c 3 ldap.cosc328.okc  
PING ldap.cosc328.okc (192.168.13.11) 56(84) bytes of data.  
64 bytes from ldap.cosc328.okc (192.168.13.11): icmp_seq=1 ttl=64 time=0.380 ms  
64 bytes from ldap.cosc328.okc (192.168.13.11): icmp_seq=2 ttl=64 time=0.374 ms  
64 bytes from ldap.cosc328.okc (192.168.13.11): icmp_seq=3 ttl=64 time=0.458 ms  
  
--- ldap.cosc328.okc ping statistics ---  
3 packets transmitted, 3 received, 0% packet loss, time 2034ms  
rtt min/avg/max/mdev = 0.374/0.404/0.458/0.038 ms  
cs213@vm2:~$ ping -c 3 kali.cosc328.okc  
PING kali.cosc328.okc (192.168.13.33) 56(84) bytes of data.  
64 bytes from kali.cosc328.okc (192.168.13.33): icmp_seq=1 ttl=64 time=0.736 ms  
64 bytes from kali.cosc328.okc (192.168.13.33): icmp_seq=2 ttl=64 time=0.415 ms  
64 bytes from kali.cosc328.okc (192.168.13.33): icmp_seq=3 ttl=64 time=0.489 ms  
  
--- kali.cosc328.okc ping statistics ---  
3 packets transmitted, 3 received, 0% packet loss, time 2030ms  
rtt min/avg/max/mdev = 0.415/0.546/0.736/0.137 ms  
cs213@vm2:~$
```

```
kali@kali: ~  
File Actions Edit View Help  
(kali@kali)~  
$ ping -c 3 ldap.cosc328.okc  
PING ldap.cosc328.okc (192.168.13.11) 56(84) bytes of data.  
64 bytes from ldap.cosc328.okc (192.168.13.11): icmp_seq=1 ttl=64 time=0.464 ms  
64 bytes from ldap.cosc328.okc (192.168.13.11): icmp_seq=2 ttl=64 time=0.797 ms  
64 bytes from ldap.cosc328.okc (192.168.13.11): icmp_seq=3 ttl=64 time=0.588 ms  
  
--- ldap.cosc328.okc ping statistics ---  
3 packets transmitted, 3 received, 0% packet loss, time 2010ms  
rtt min/avg/max/mdev = 0.464/0.616/0.797/0.137 ms  
(kali@kali)~  
$ ping -c 3 vm2.cosc328.okc  
PING vm2.cosc328.okc (192.168.13.22) 56(84) bytes of data.  
64 bytes from vm2.cosc328.okc (192.168.13.22): icmp_seq=1 ttl=64 time=0.443 ms  
64 bytes from vm2.cosc328.okc (192.168.13.22): icmp_seq=2 ttl=64 time=0.731 ms  
64 bytes from vm2.cosc328.okc (192.168.13.22): icmp_seq=3 ttl=64 time=0.714 ms  
  
--- vm2.cosc328.okc ping statistics ---  
3 packets transmitted, 3 received, 0% packet loss, time 2041ms  
rtt min/avg/max/mdev = 0.443/0.629/0.731/0.131 ms  
(kali@kali)~
```