Notes

Install DHCP server using :-

sudo dnf install dhcp-server-y

we will get access to dhcpd.conf file. I have made all the configuration in the dhcpd.conf file.

sudo nano /etc/dhcp/dhcpd.conf

```
option domain-name "dundermifflin.com";
option domain-name-servers 128.138.240.1, 128.138.130.30;
default-lease-time 600;  # Lease time of 10 minutes
max-lease-time 600;
subnet 100.64.7.0 netmask 255.255.255.0 {
   range 100.64.7.100 100.64.7.199;  # DHCP pool range for LAN
   option routers 100.64.7.1;       # Machine A's LAN interface IP
}
subnet 10.21.32.0 netmask 255.255.255.0 {
   range 10.21.32.100 10.21.32.199;  # DHCP pool range for DMZ
   option routers 10.21.32.1;       # Machine A's DMZ interface IP
}
host dns0 {
   hardware ethernet 00:50:56:89:5a:82;  # MAC for Machine B
   fixed-address 100.64.7.2;
   option host-name "dns0.dundermifflin.com";
}
host web0 {
   hardware ethernet 00:50:56:89:d6:71;  # MAC for Machine C
   fixed-address 100.64.7.3;
   option host-name "web0.dundermifflin.com";
}
```

```
host web1 {
   hardware ethernet 00:50:56:89:d2:bb;  # MAC for Machine D
   fixed-address 100.64.7.4;
   option host-name "web1.dundermifflin.com";
}
host nfs {
   hardware ethernet 00:50:56:89:53:c9;  # MAC for Machine E
   fixed-address 10.21.32.2;
   option host-name "nfs.dundermifflin.com";
}
host dns1 {
   hardware ethernet 00:50:56:89:c1:11;  # MAC for Machine F
   fixed-address 100.64.7.6;
   option host-name "dns1.dundermifflin.com";
}
host bsd {
   hardware ethernet 00:50:56:89:1c:c4;  # MAC for Machine X
   fixed-address 100.64.7.7;
   option host-name "bsd.dundermifflin.com";
}
```

Restart the dhcp server and check the status.

```
systemctl restart dhcpd
sudo systemctl status dhcpd
```

To ensure dhcp is enabled in every machine

```
nmcli connection modify "ens192" ipv4.method auto
nmcli connection up "ens192"
nmcli connection show "ens192”
```

dhclient was used to in Debian machine to set dynamically

in FreeBSD machine we have to edit the /etc/rc.conf file we have activate DHCP.

ifconfig_vmx0="DHCP” and remove the hostname and defaultrouters.

To change the hostname we can move the hostname file from etc to the root folder so we can see the updated hostname.

sudo mv /etc/hostname /root/

reboot and check whether hostname is updated or not.

sudo tail -f /var/log/messages # we can see the DHCP Dsicover,offer,Ack

hostname	#to check the hostname of the client
ip a	# to check the ip address of client
ip route | grep default	# to check the default gateway
cat /etc/resolv.conf	# to check the domain and name servers

It took me 7 hours to finish assignment.