How to Assign an IP Address on a Linux Computer

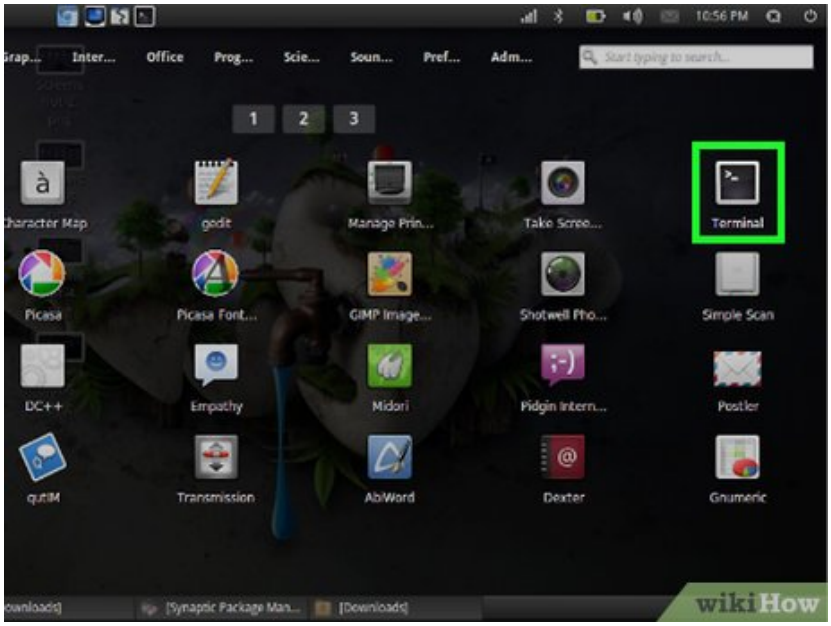
This wikiHow teaches you how to assign a new IP address to your computer when using Linux. Doing so can prevent connection issues for the item in question. Verify your Linux version. Popular Debian-based Linux distributions include Ubuntu,...

Method 1 of 2:

On Debian-Based Linux

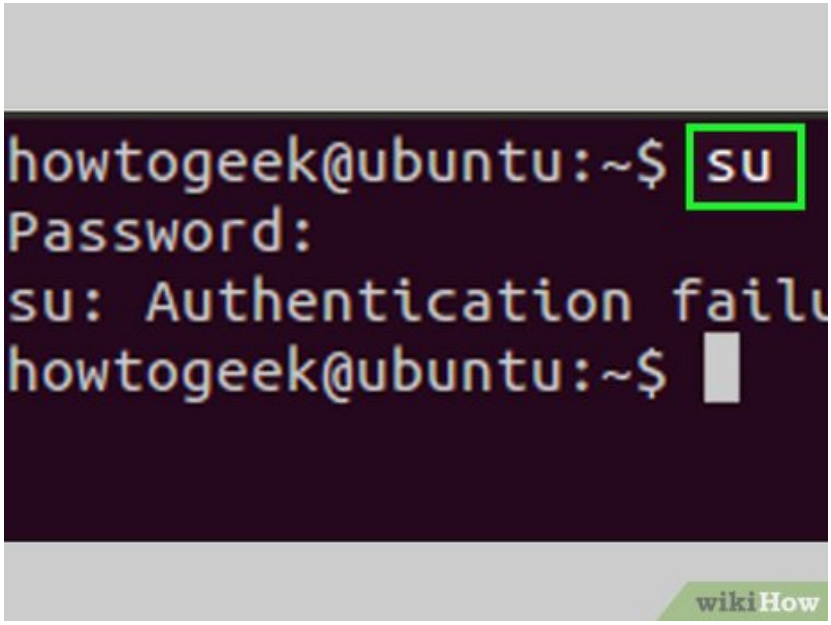
1. 

Verify your Linux version. Popular Debian-based Linux distributions include Ubuntu, Mint, and Raspbian versions.

2. 

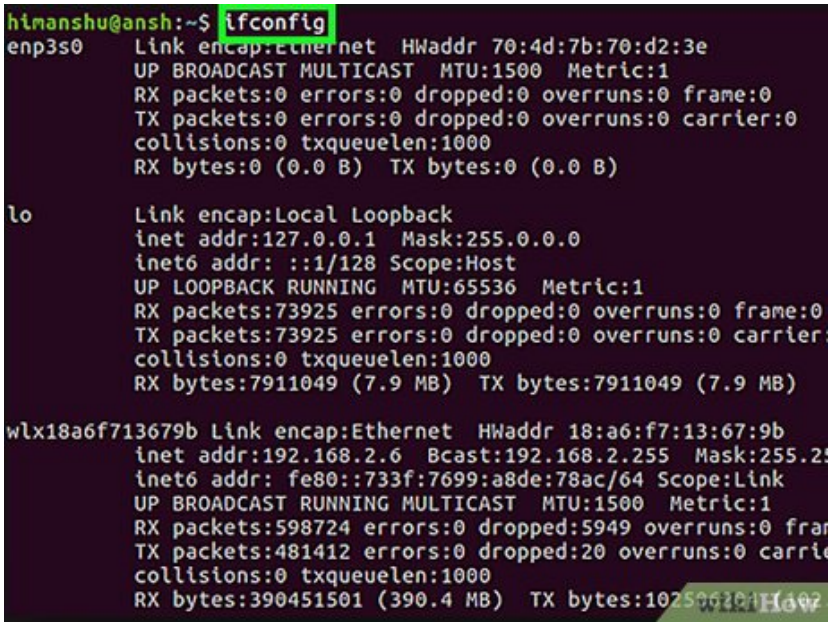
Open Terminal. This is the command line app that's the basis of all Linux distributions. Depending on your Linux version, you may have several ways of opening Terminal:

1. Press Ctrl + Alt + T or Ctrl + Alt + F1 (if you're on a Mac, substitute the ? Command key for Ctrl.
2. Click the text box at the top or bottom of the screen if possible.
3. Open the **Menu** window and find the "Terminal" application, then click on it.

3. 

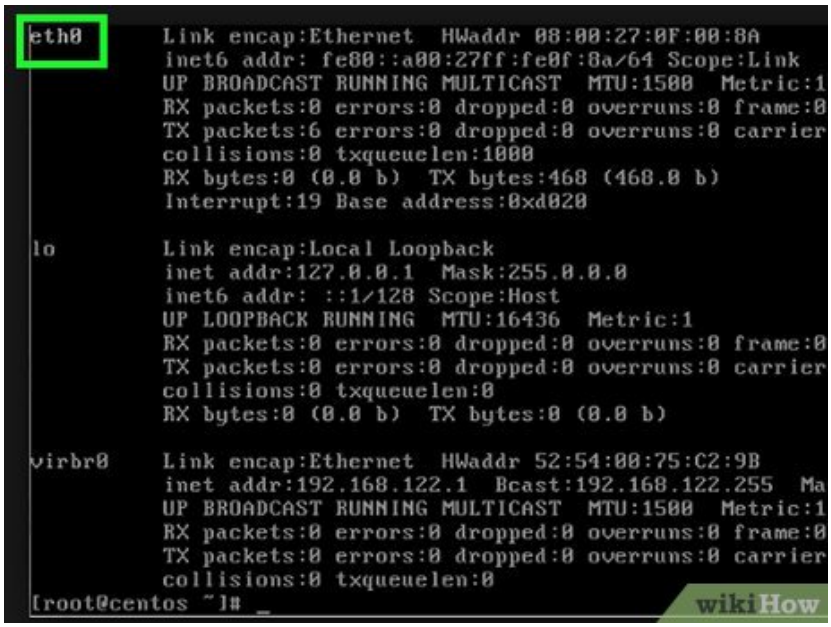
Switch to root. If you aren't already logged into the "root" user directory, type in `su` and press ? Enter, then type in your root user password when prompted and press ? Enter.

1. A "root" account is the Linux equivalent of an Administrator account on a Windows or Mac computer.

4. 

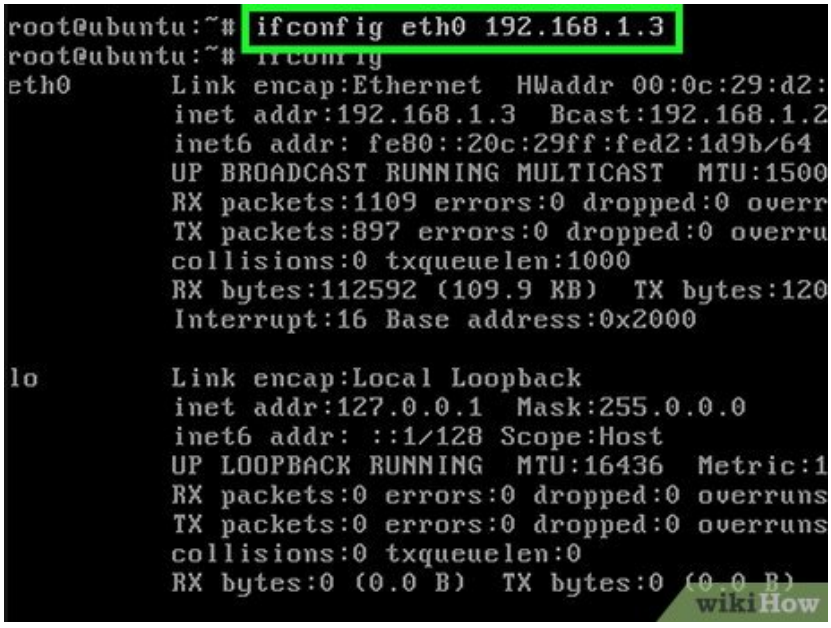
Bring up a list of your current Internet items. Type in `ifconfig` and press ? Enter to do so. You should see a list of item names appear on the left side of the window with their details listed on the right.

1. The top item should be your current router or Ethernet connection. This item's name is "eth0" (Ethernet) or "wifi0" (Wi-Fi) in Linux.

5. 

Find the item to which you want to assign an IP address. Note the name of the item that you want to change. You'll find the name on the left side of the window.

1. In most cases, this is the "eth0" or "wifi0" item.

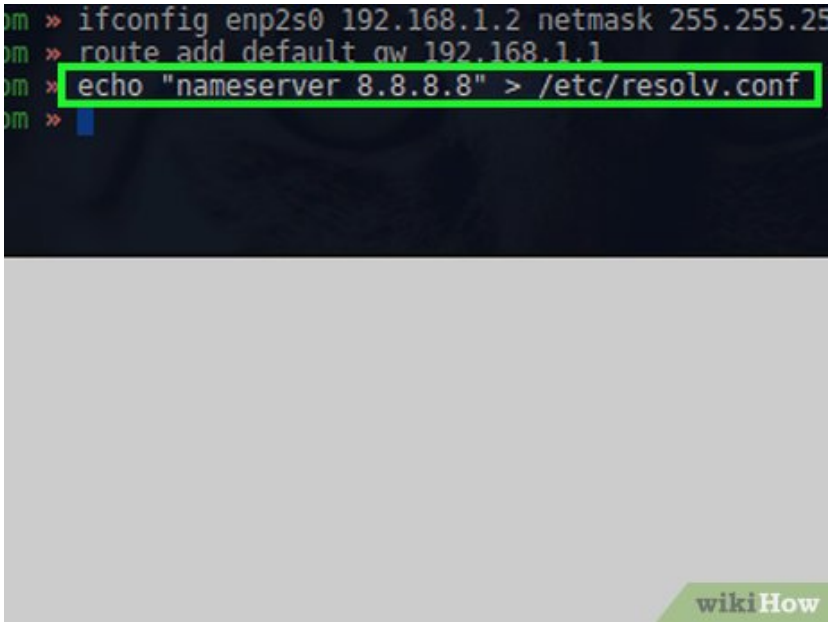
6. 

Change the item's IP address. Type in `sudo ifconfig name ipaddress netmask 255.255.255.0 up` —making sure to replace *name* with your item's name and *ipaddress* with your preferred IP address—and press ? Enter.

1. To assign an IP of "192.168.2.100" to your ethernet connection ("eth0"), for example, you'd enter `sudo ifconfig eth0 192.168.0.100 netmask 255.255.255.0` here.

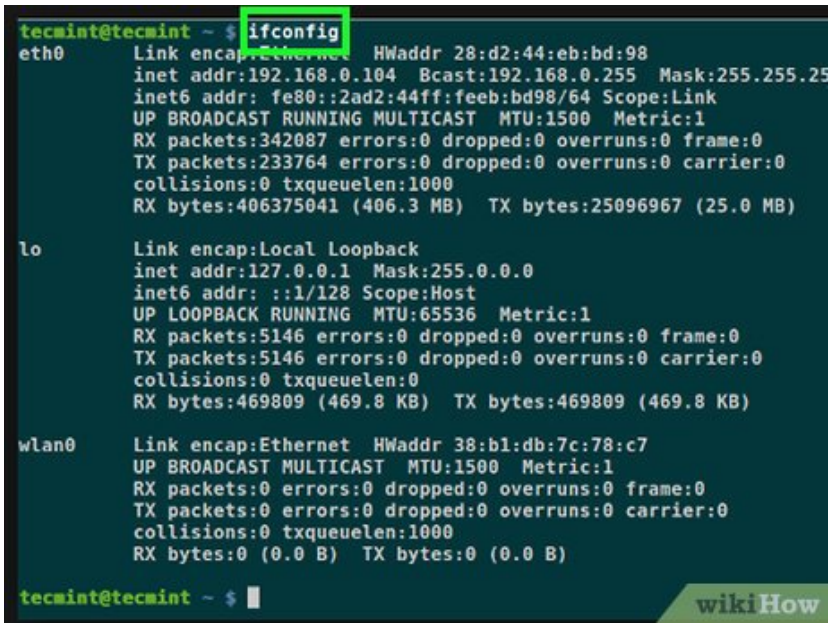
7. 

Assign a default gateway. Type in `route add default gw 192.168.1.1` and press ? Enter.[1]

8. 

Add a DNS server. Type in `echo "nameserver 8.8.8.8" > /etc/resolv.conf` and press ? Enter .

1. If you have a different DNS server address that you would rather use, enter that in the place of `8.8.8.8` .

9. 

Check your item's new IP address. Enter the `ifconfig` command again, find your item, and look at the address to the right of the item's name. You should see the IP address that you just assigned.

Method 2 of 2:

On RPM-Based Linux

1. 

Verify your Linux version. Popular RPM-based Linux distributions include CentOS, Red Hat, and Fedora versions.

2. 

Open Terminal. This is the command line app that's the basis of all Linux distributions. Depending on your Linux version, you may have several ways of opening Terminal:

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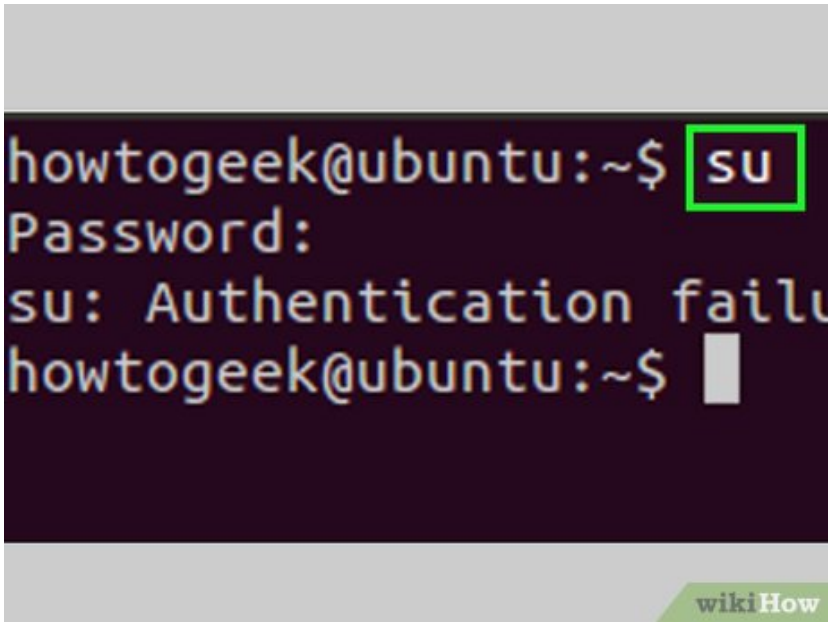
3. 

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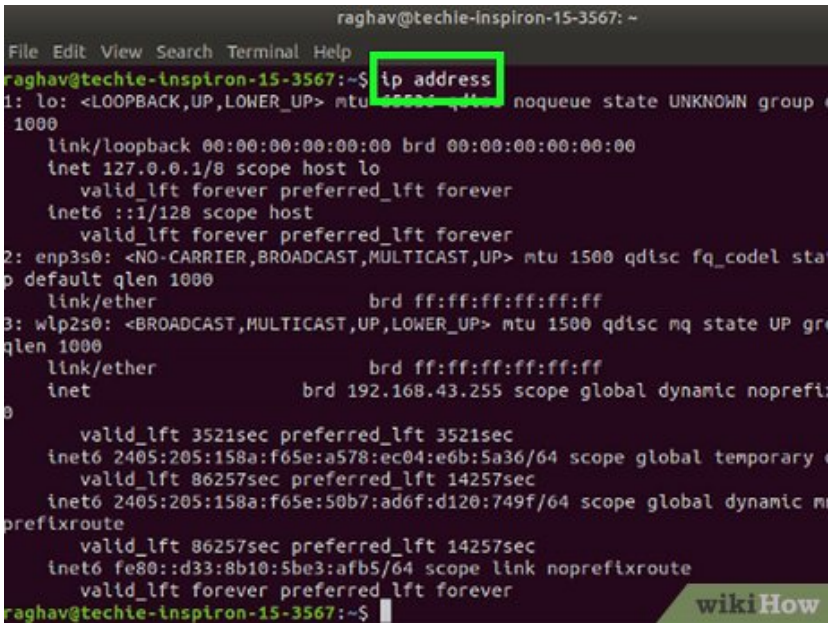
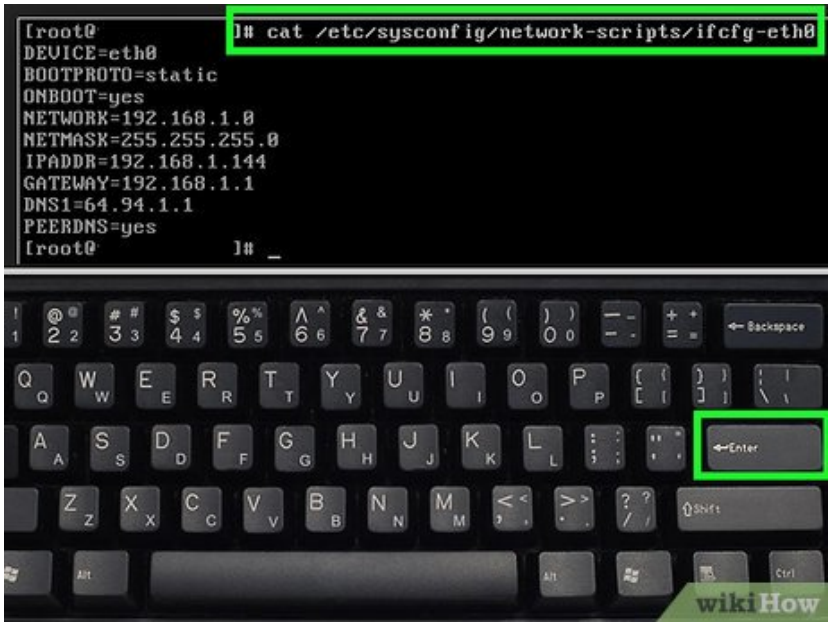
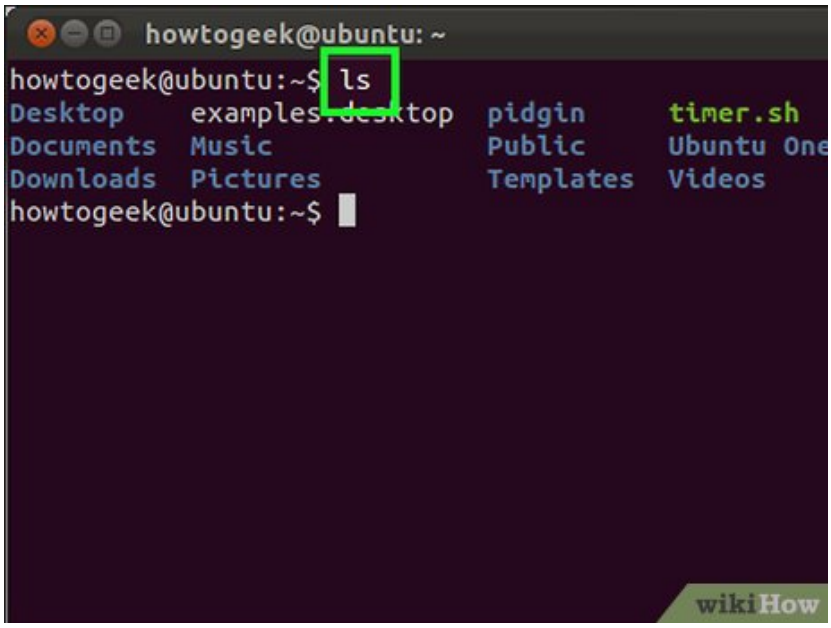
4. 

Bring up a list of your current Internet items. Type in `ip a` to view your network connections.

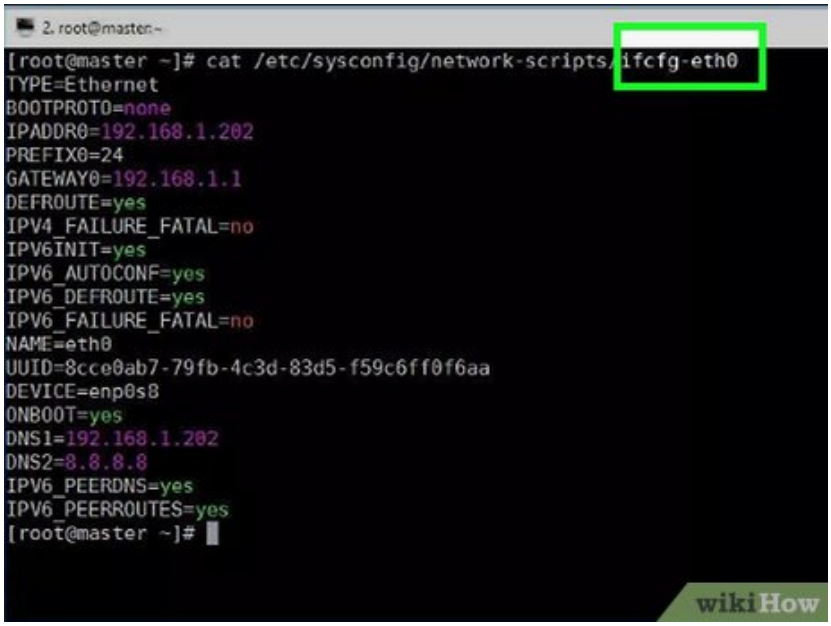
5. **Find the network connection that you want to change.** This will normally be the Ethernet or Wi-Fi connection, which has an IP address currently listed on the right side of the window.

6. 

Switch to the network scripts directory. Type in `cd /etc/sysconfig/network-scripts` and press ? Enter.

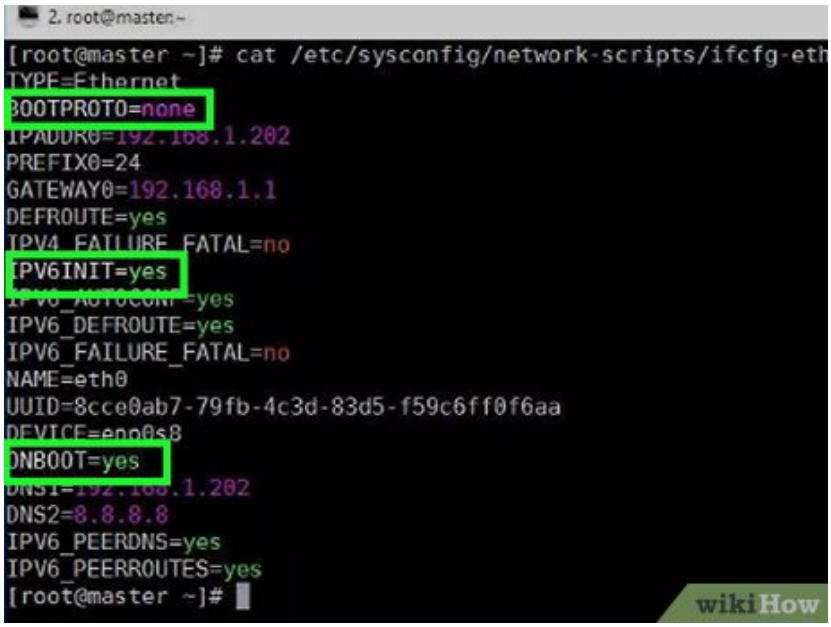
7. 

Display the network options. Type in `ls` and press ? Enter. You should see your current connection's name in the upper-left side of the network option results.

8. 

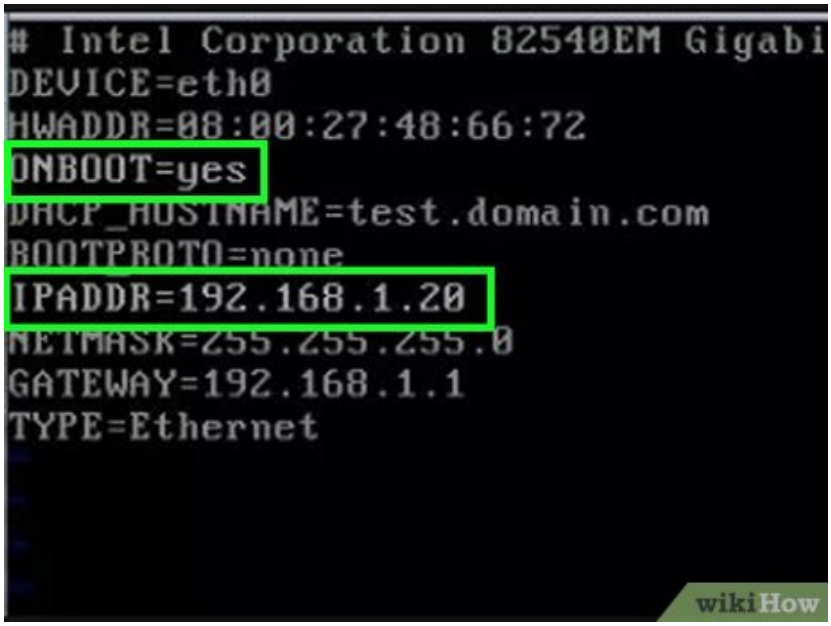
Open the network options for your connection. Type in `vi ifcfg-network name` and press ? Enter. Doing so will open the network's properties in your Vi editor.

1. For a network named "eno12345678", for example, you'd enter `vi ifcfg-eno12345678` here.

9. 

Edit the network's information. Change the following values:

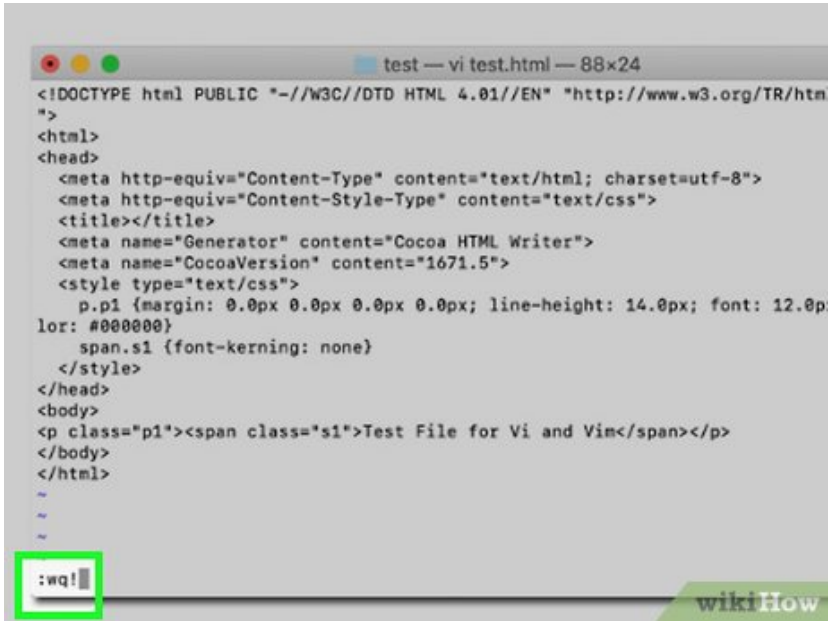
1. **BOOTPROTO** - Change `dhcp` to `none`
2. **Any IPV6 entry** - Delete any IPV6 entries entirely by moving the cursor to the `I` on the left and pressing Del.
3. **ONBOOT** - Change `no` to `yes`

10. 

Enter a new IP category. Press ? Enter to jump down one line from the **ONBOOT** category, type in `IPADDR=` and enter the IP address that you want to use, and then press ? Enter.

1. For example: to use "192.168.2.23" as your IP address, you'd type in `IPADDR=192.168.2.23` and press ? Enter.

11. **Enter netmask, gateway, and DNS information.** To do so:[2]
    1. Type in `PREFIX=24` and press ? Enter. You can also enter `NETMASK=255.255.255.0` here.
    2. Type in `GATEWAY=192.168.2.1` and press ? Enter. Substitute your preferred gateway address if different.

12. 

Save and exit the file. You can use the **File** menu to do this, or you can type in `:wq` and press ? Enter.