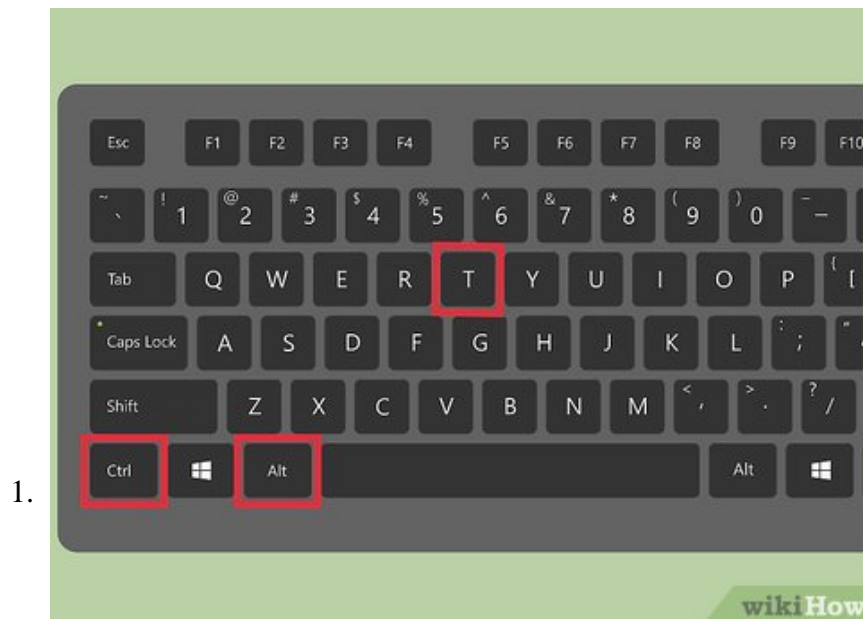


How to Become Root in Linux

The 'root' account on a Linux computer is the account with full privileges. Root access is often necessary for performing commands in Linux, especially commands that affect system files. Because root is so powerful, it's recommended to...

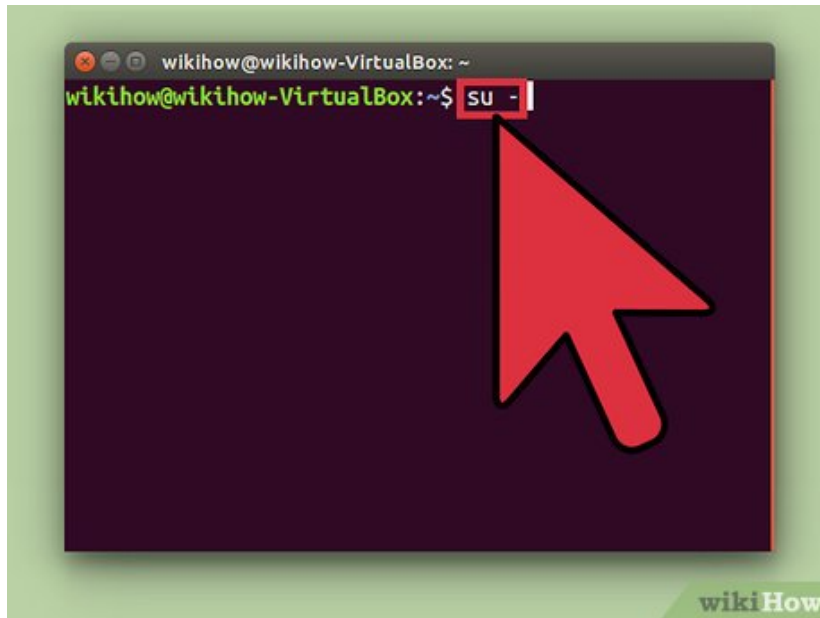
Method 1 of 4:

Gaining Root Access in the Terminal



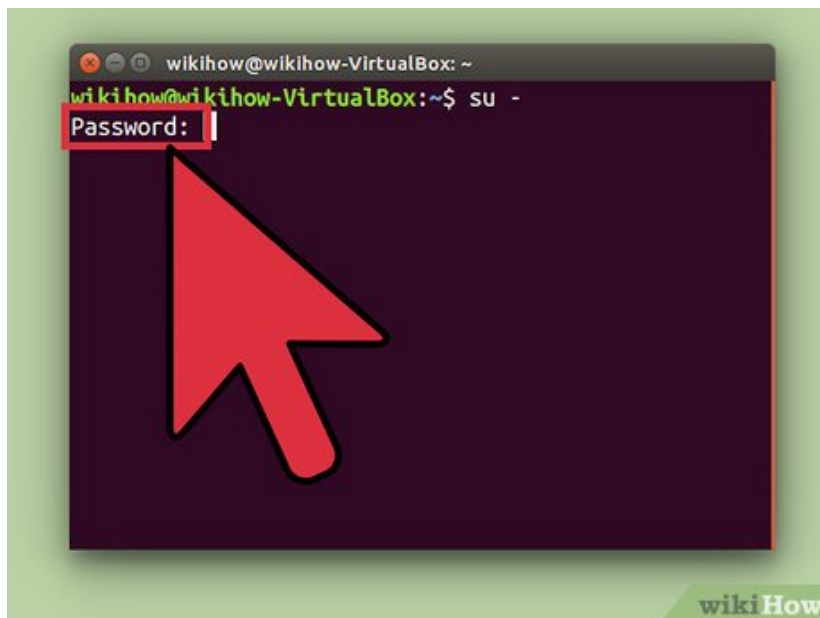
Open the terminal. If the terminal is not already open, open it. Many distributions allow you to open it by pressing `Ctrl` + `Alt` + `T`.

2.



Type `su -` and press `?Enter`. This will attempt to log you in as "super user." You can actually use this command to log in as any user on the machine, but when left blank it will attempt to log in as root.^[1]

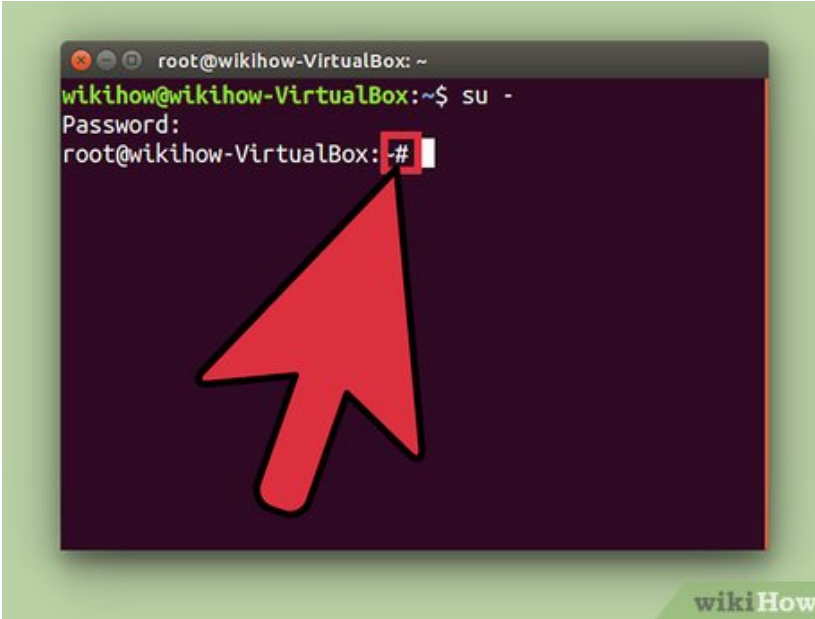
3.



Enter the root password when prompted. After typing `su -` and pressing `?Enter`, you'll be prompted for the root password.

1. If you get an "authentication error" message, your root account is likely locked. See the next section for instructions on unlocking it.

4.

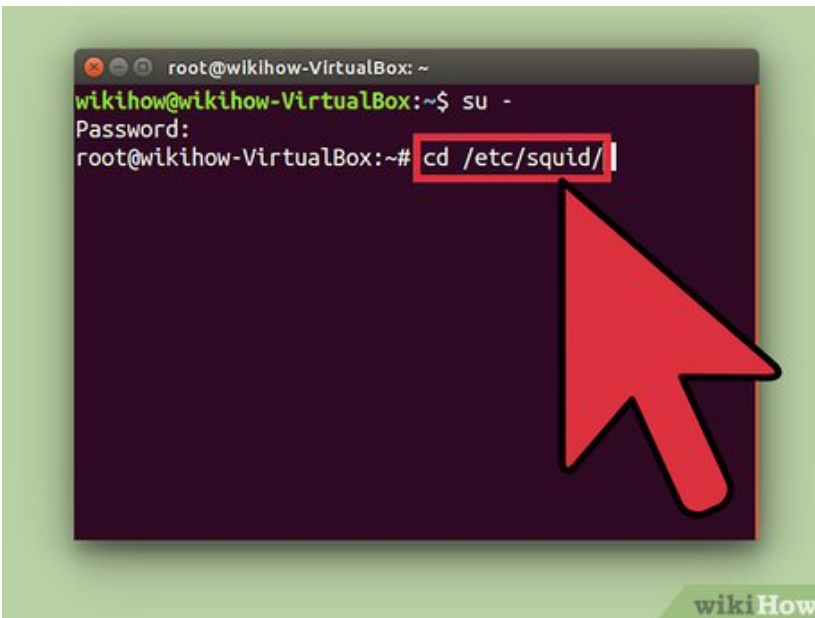


```
root@wikiphow-VirtualBox: ~  
wikiphow@wikiphow-VirtualBox:~$ su -  
Password:  
root@wikiphow-VirtualBox:~#
```

A terminal window titled "root@wikiphow-VirtualBox: ~" showing the execution of the `su -` command. The prompt changes from `wikiphow@wikiphow-VirtualBox:~$` to `root@wikiphow-VirtualBox:~#` after the password is entered. A red mouse cursor points to the `#` character in the prompt.

Check the command prompt. When you are logged in as root, the command prompt should end with `#` instead of `$`.^[2]

5.

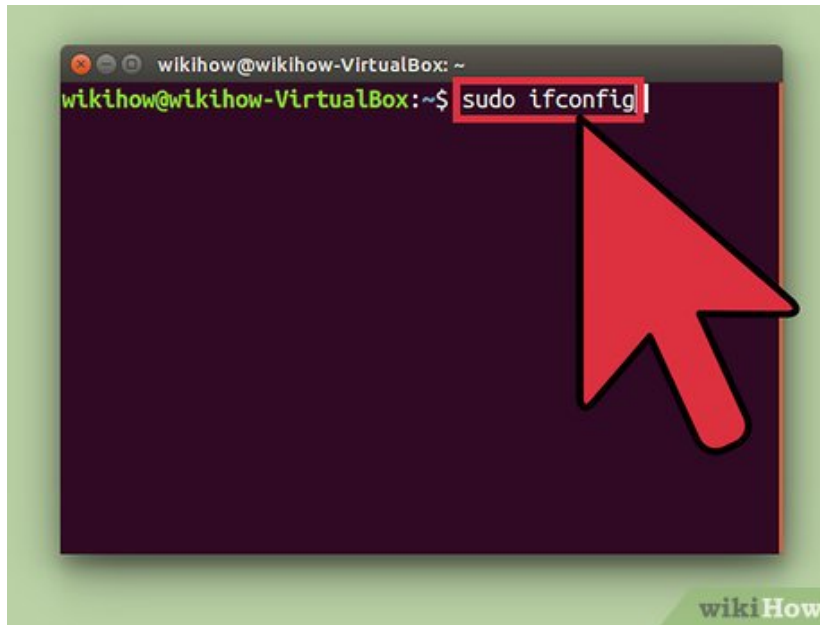


```
root@wikiphow-VirtualBox: ~  
wikiphow@wikiphow-VirtualBox:~$ su -  
Password:  
root@wikiphow-VirtualBox:~# cd /etc/squid/ |
```

A terminal window titled "root@wikiphow-VirtualBox: ~" showing the execution of the `su -` command. The prompt changes from `wikiphow@wikiphow-VirtualBox:~$` to `root@wikiphow-VirtualBox:~#` after the password is entered. The command `cd /etc/squid/ |` is entered, and a red mouse cursor points to the `|` character at the end of the command.

Enter the commands that require root access. Once you've used `su -` to log in as root, you can run any commands that require root access. The `su` command is preserved until the end of the session, so you don't need to keep re-entering the root password every time you need to run a command.

6.



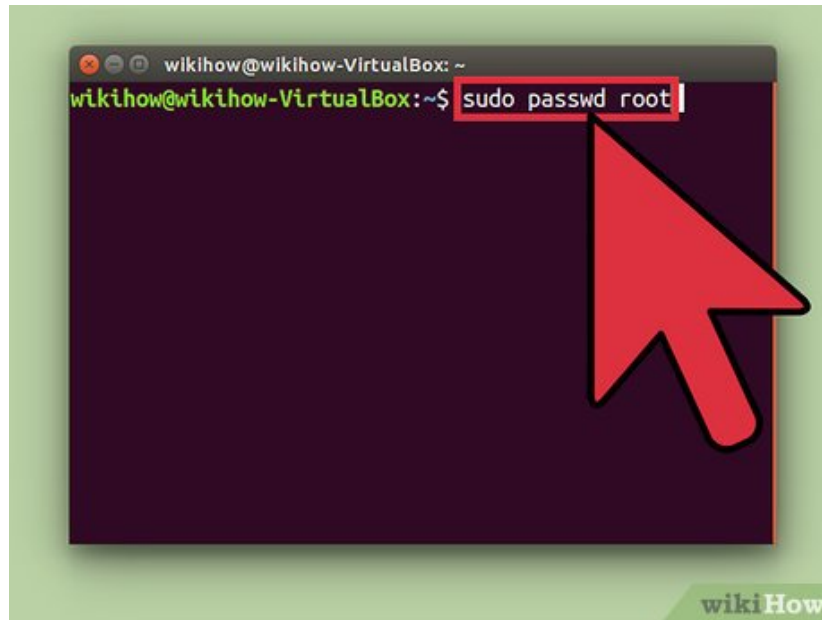
Consider using `sudo` instead of `su -`. `sudo` ("super user do") is a command that lets you run other commands as root temporarily. This is the best way for most users to run root commands, as the root environment is not maintained, and the user doesn't need to know the root password. Instead, the user will enter their own user password for temporary root access.^[3]

1. Type `sudo command` and press `Enter` (e.g. `sudo ifconfig`). When prompted for the password, enter your *user* password, not the root password.
2. `sudo` is the preferred method for distributions like Ubuntu, where it will work even when the root account is locked.
3. This command is limited to users with administrator privileges. Users can be added or removed from `/etc/sudoers`.

Method 2 of 4:

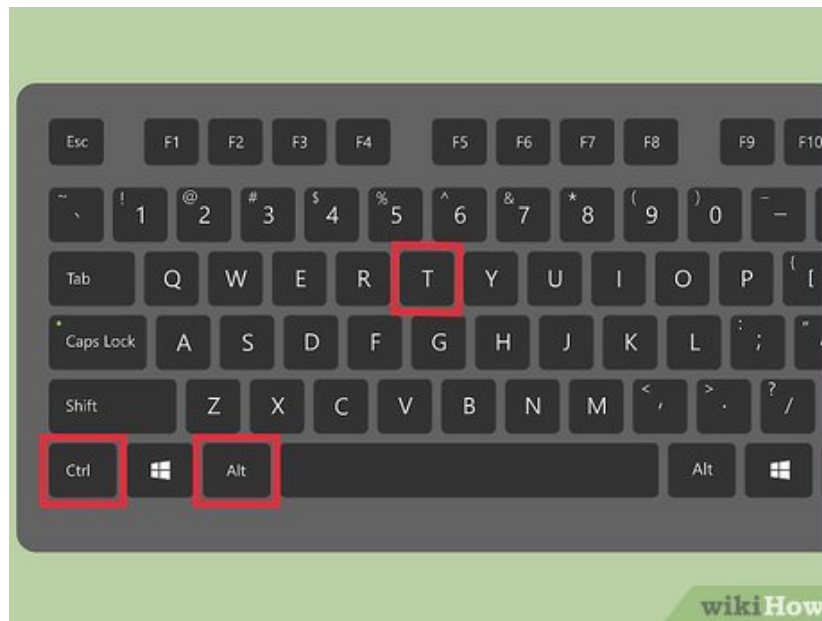
Unlocking the Root Account (Ubuntu)

1.



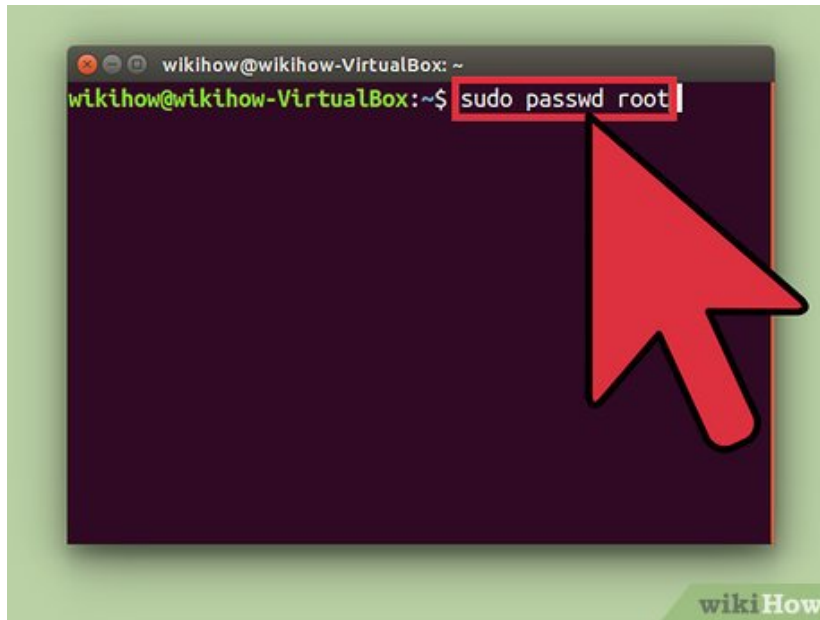
Unlock the root account (Ubuntu). Ubuntu (and several other distributions) locks the root account so that the average user can't access it. This is done because root access is rarely necessary when using the `sudo` command (see the previous section). Unlocking the root account will allow you to log in as root.

2.



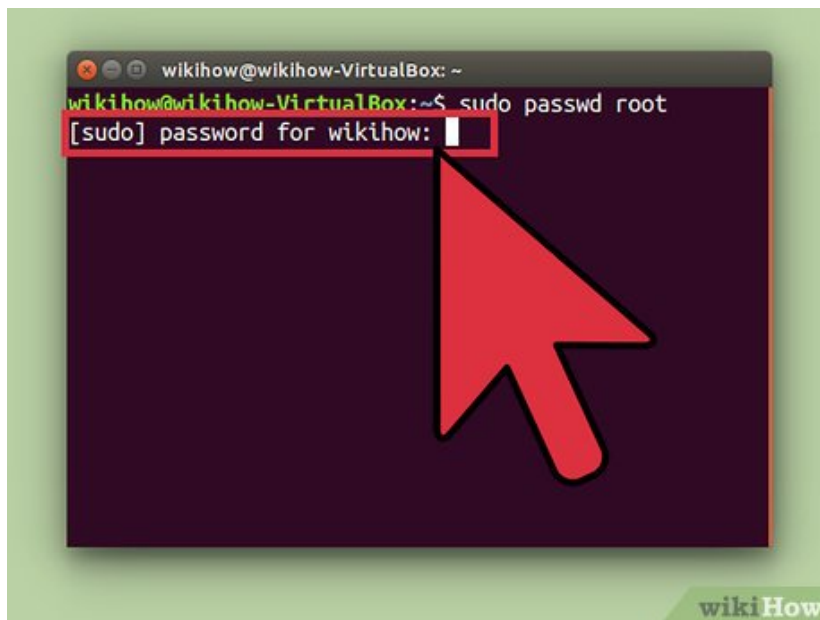
Open the terminal. If you're in the desktop environment, you can press `Ctrl` + `Alt` + `T` to start the terminal.

3.



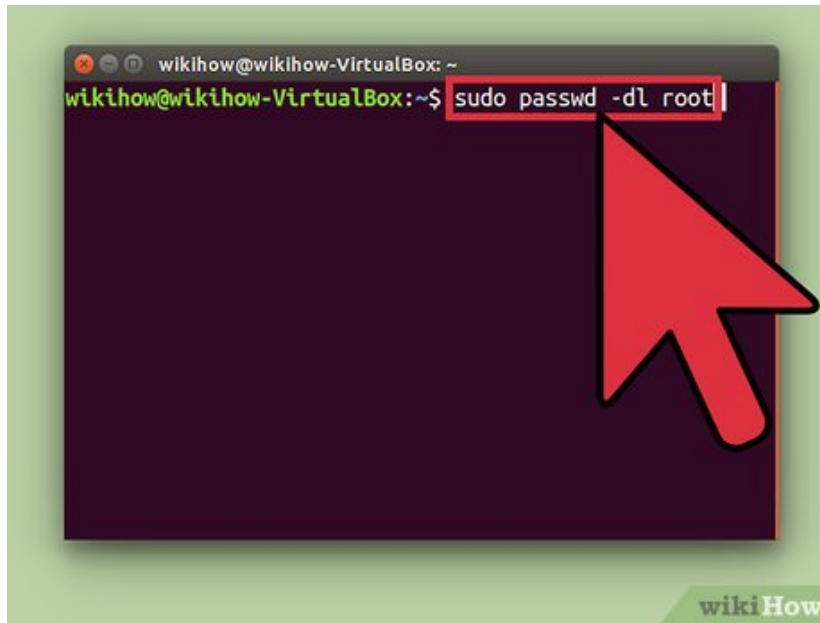
Type `sudo passwd root` and press `Enter`. When prompted for a password, enter your *user* password.

4.



Set a new password. You'll be prompted to create a new password and enter it twice. Once a password has been set, the root account will be active.^[4]

5.



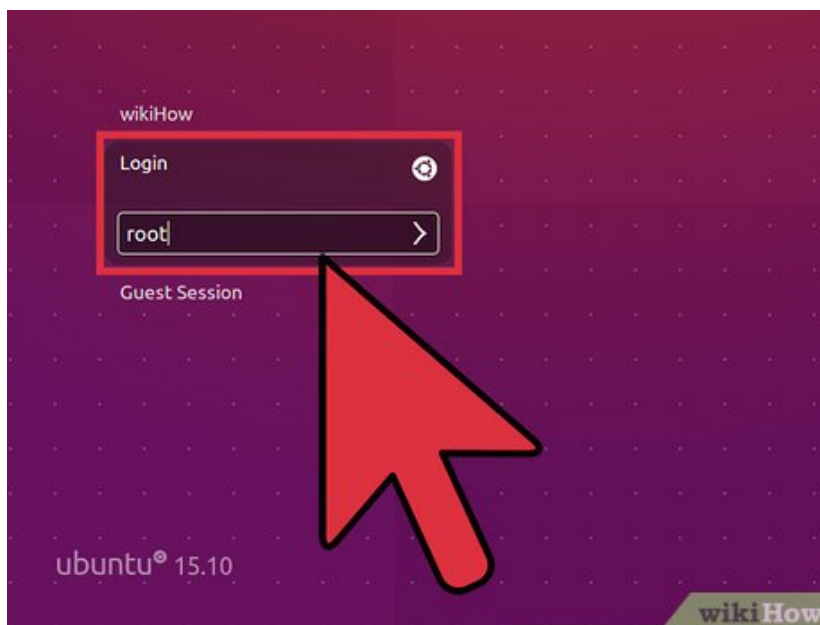
Lock the root account again. If you want to lock the root account, enter the following command to remove the password and lock root:

1. `sudo passwd -dl root`

Method 3 of 4:

Logging in as Root

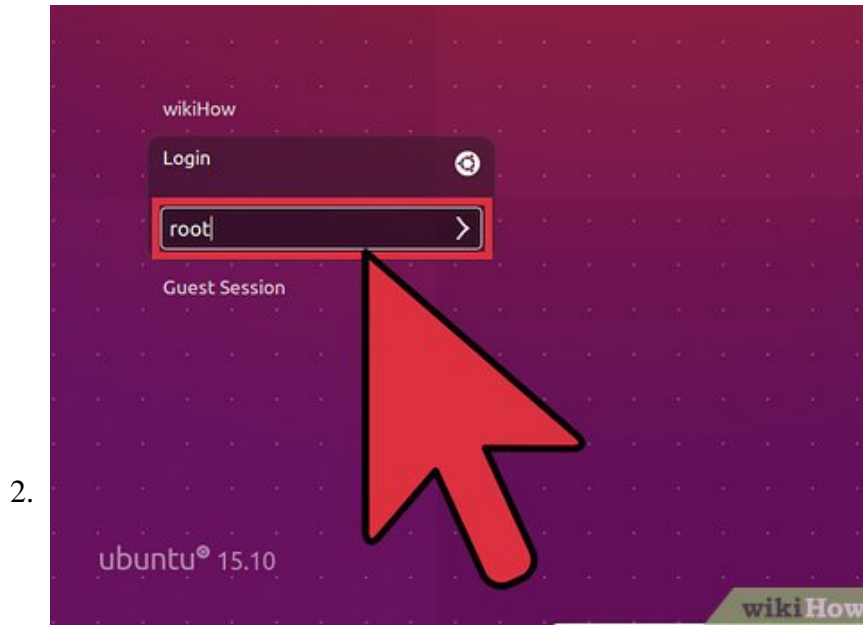
1.



Consider using other methods for gaining temporary root access. Logging in as root is not recommended for regular use, as it is very easy to perform commands that will render your system inoperable, and it also poses a security risk, especially if you are running an SSH server on your machine. Only log in as root when performing emergency repairs, such as dealing with disk failures or restoring

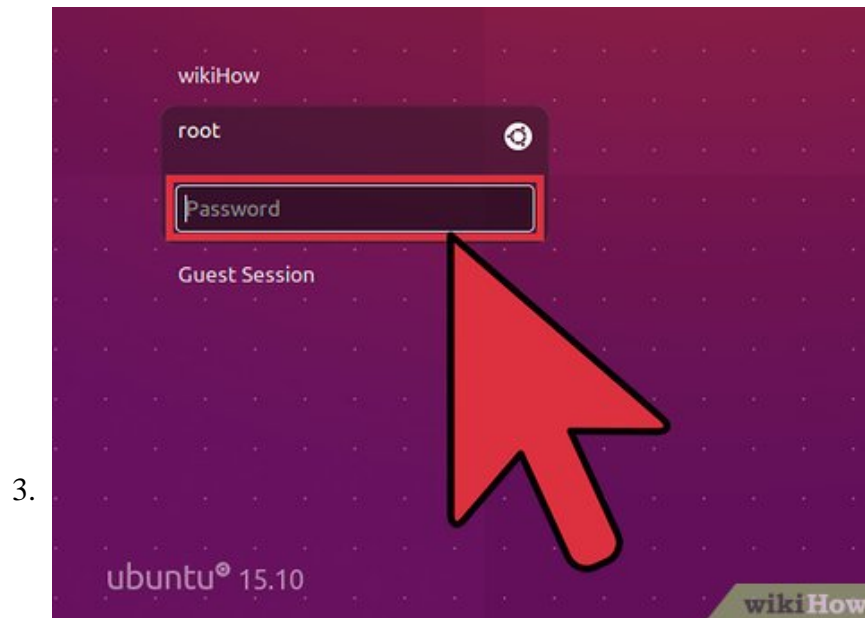
locked accounts.

1. Using `sudo` or `su` instead of logging in as root will help prevent unintended damage while logged in as root. Using these commands gives the user a chance to think about the command before severe damage is done.
2. Some distributions, such as Ubuntu, leave the root account locked until you manually unlock it. Not only does this prevent users from unknowingly doing too much damage using the root account, it also secures the system from potential hackers, as the root account is typically targeted first. With a locked root account, hackers aren't able to gain access with it. See the previous section for instructions on unlocking root in Ubuntu.



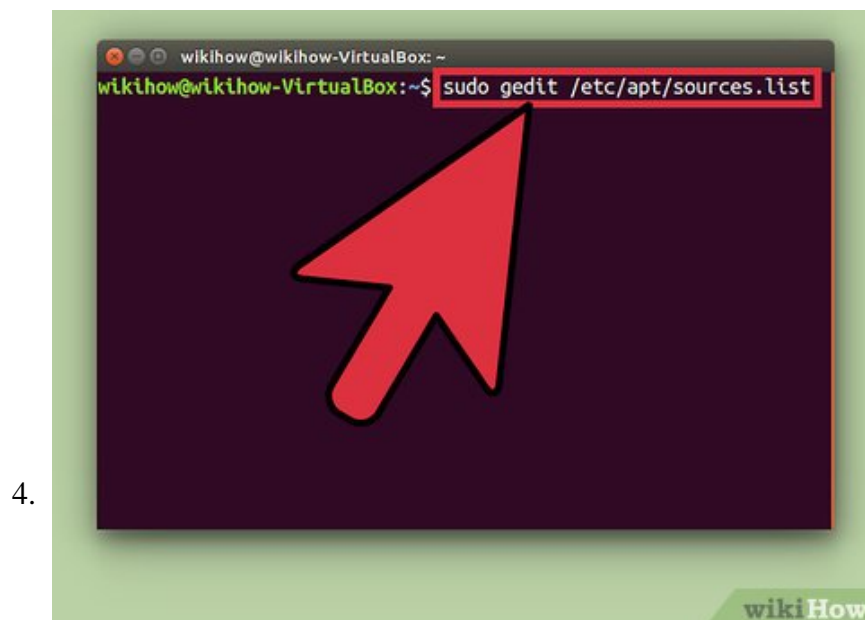
Enter `root` as the user when logging into Linux. If the root account is unlocked and you know the password, you can log in as root when you're prompted to log in with a user account. Enter `root` as the user when prompted to log in.

1. If you need root access to perform a command, use the method in the previous section.



Enter the root password as the user password. After entering `root` as the username, enter the root password when prompted.

1. In many cases, the root password may be "password."
2. If you don't know the root password, or have forgotten it, see the next section for instructions on resetting it.
3. In Ubuntu, the root account is locked and cannot be used until it has been unlocked.

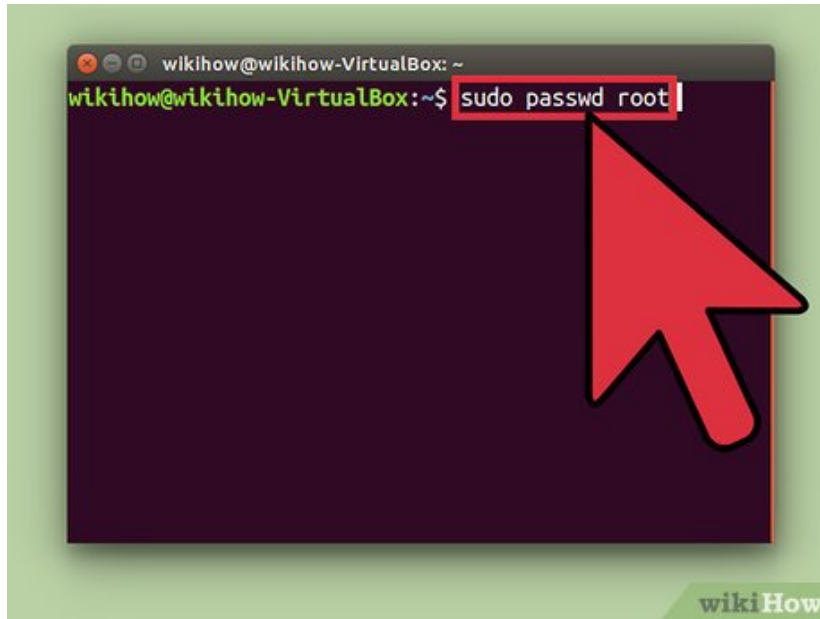


Avoid running complex programs while logged in as root. There's a chance that the program you intend to run will have a negative effect on your system when it has root access. It's highly recommended that you use `sudo` or `su` to run programs instead of logging in as root.

Method 4 of 4:

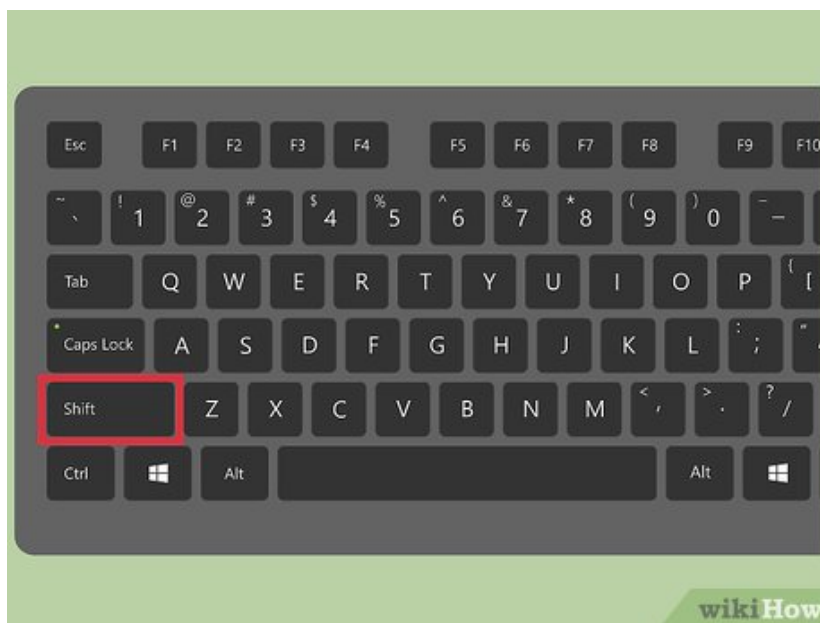
Resetting the Root or Admin Password

1.



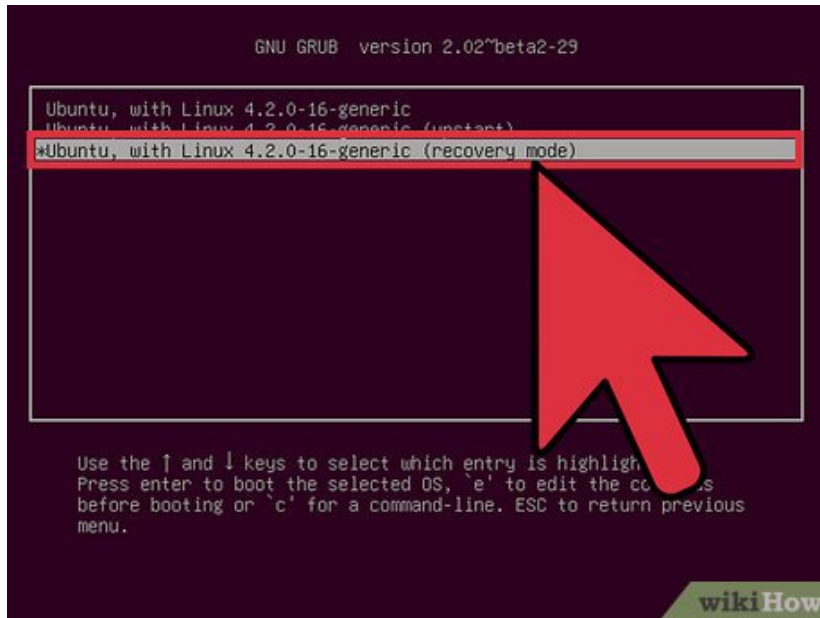
Reset the root password if it has been forgotten. If you've forgotten the root password *and* your user password, you'll need to boot into recovery mode in order to change them. If you know your user password and need to change the root password, just type `sudo passwd root`, enter your user password, then create a new root password.

2.

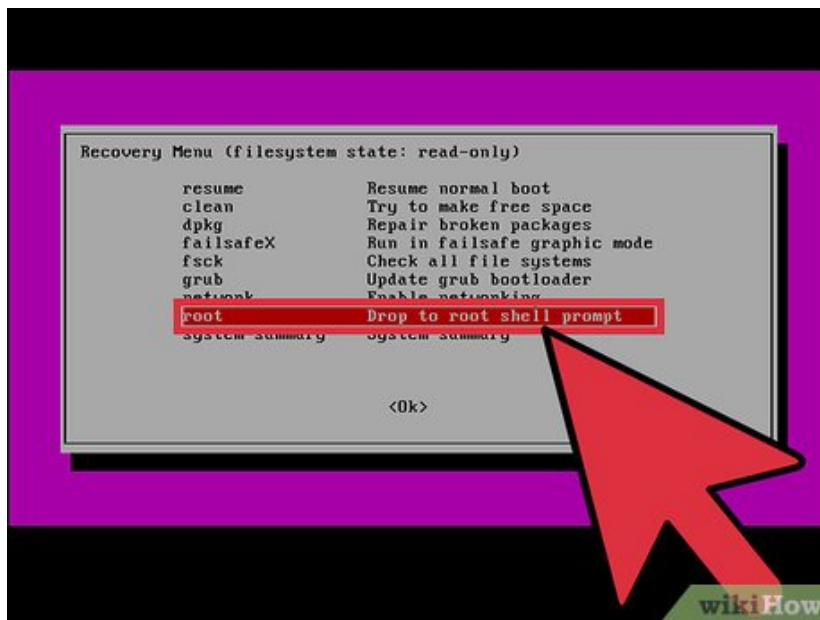


Reboot your computer and hold left-? Shift after the BIOS screen. This will open the GRUB menu.

1. The timing on this can be tricky, so you may have to try multiple times.



Select the first (recovery mode) entry on the list. This will load recovery mode for your current distribution.

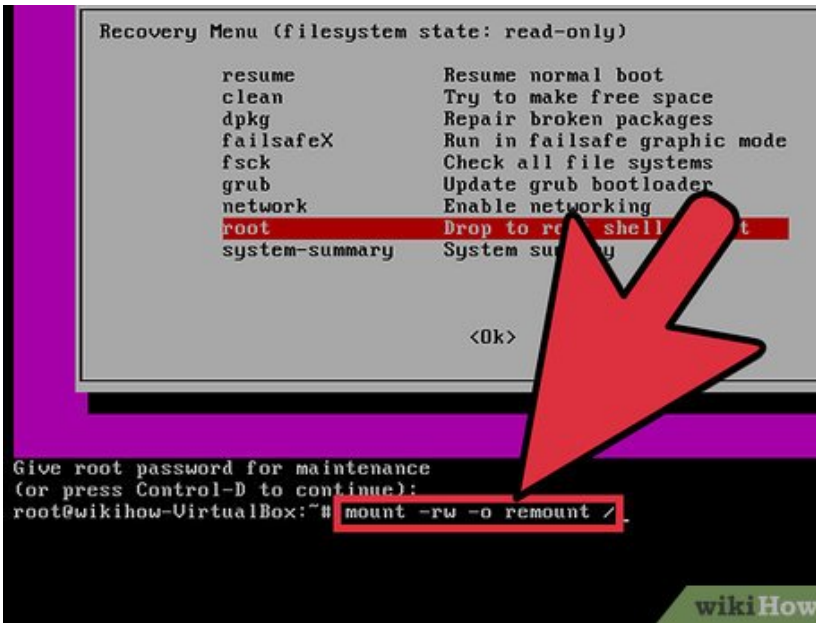


```
Recovery Menu (filesystem state: read-only)

resume          Resume normal boot
clean           Try to make free space
dpkg            Repair broken packages
failsafeX       Run in failsafe graphic mode
fsck            Check all file systems
grub            Update grub bootloader
network         Enable networking
root            Drop to root shell prompt
system-summary System summary

<Ok>

5. Give root password for maintenance
(or press Control-D to continue):
root@wikihow-VirtualBox:~# mount -rw -o remount /
```

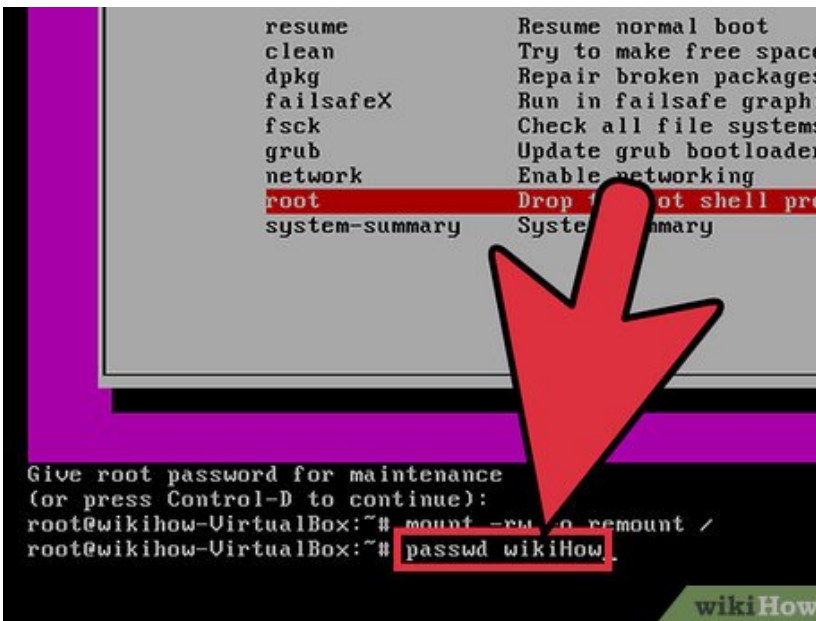


Remount the drive with write permissions. When you boot into recovery mode, you will typically only have read permissions. Enter the following command to enable write access:

1. `mount -rw -o remount /`

```
resume          Resume normal boot
clean           Try to make free space
dpkg            Repair broken packages
failsafeX       Run in failsafe graphi
fsck            Check all file systems
grub            Update grub bootloader
network         Enable networking
root            Drop to root shell pro
system-summary System summary

6. Give root password for maintenance
(or press Control-D to continue):
root@wikihow-VirtualBox:~# mount -rw -o remount /
root@wikihow-VirtualBox:~# passwd wikiHow
```




Create a new password for any accounts you're locked out of. Once you're logged in as root and have changed the access permissions, you can create a new password for any account:

1. Type `passwd accountName` and press `?Enter`. If you need to change the root password, type `passwd root`.
2. Enter the new password twice when prompted.

```
7. 

|                |                       |
|----------------|-----------------------|
| failsafeX      | Run in failsafe graph |
| fscck          | Check all file system |
| grub           | Update grub bootloade |
| network        | Enable networking     |
| root           | Drop to root shell pr |
| system-summary | System summary        |

  
<Ok>  
  
Give root password for maintenance  
(or press Control-D to continue):  
root@wikihow-VirtualBox:~# mount -r  
root@wikihow-VirtualBox:~# passwd w  
Enter new UNIX password:  
Retype new UNIX password:  
passwd: password updated successfully  
root@wikihow-VirtualBox:~# reboot
```



Reboot your computer after resetting passwords. Once you're finished resetting passwords, you can reboot and use your computer as normal. Your new passwords will take effect immediately.^[5]

You finished reading the article "**How to Become Root in Linux**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.