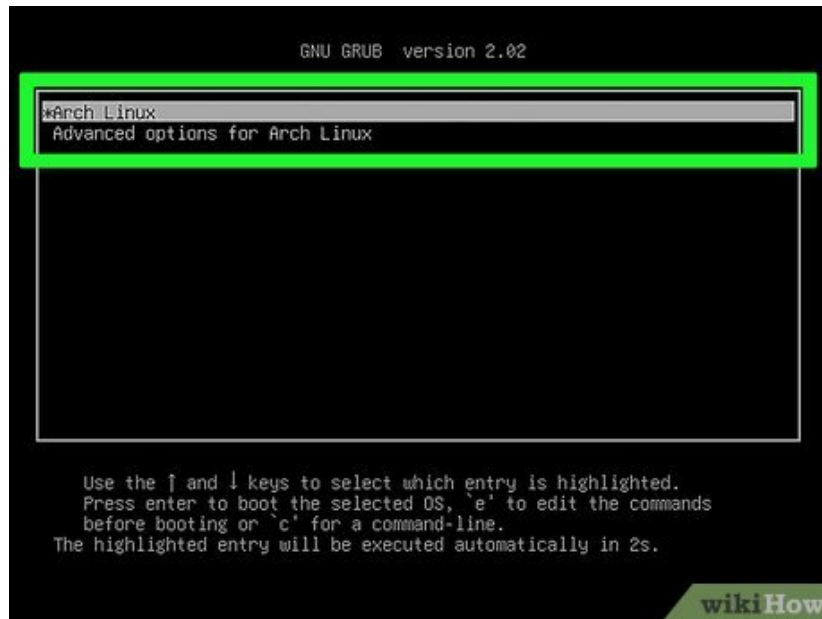


How to Install Gnome on Arch Linux

This wikiHow teaches you how to install the GNOME graphical user interface (GUI) on a computer that's running Arch Linux. GNOME is one of the most popular GUIs for Arch Linux, as Arch Linux has no GUI by default. Make sure that you're...

Part 1 of 3:

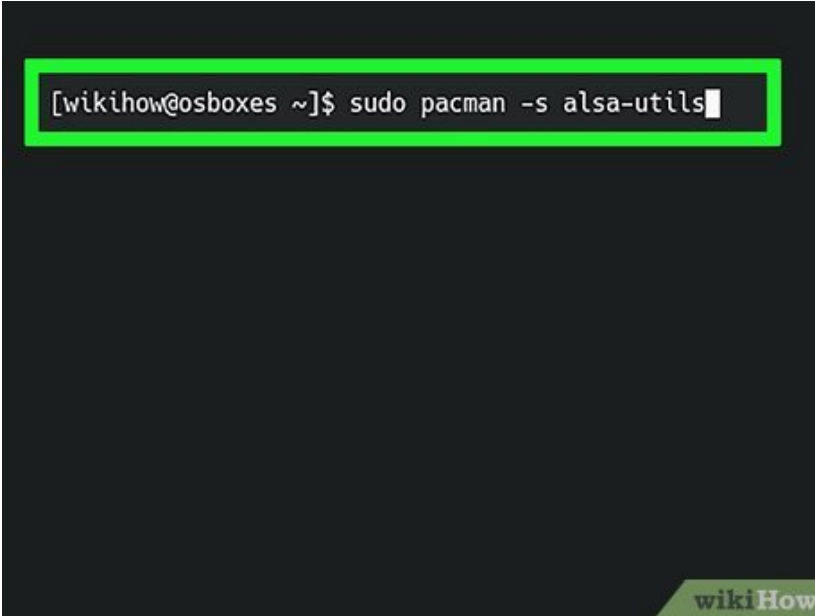
Setting up Sound



Make sure that you're using Arch Linux. If you have a dual-boot system, you may need to switch to Arch Linux by restarting your computer, selecting **Arch Linux** when prompted, and pressing Enter.

1. If you restart your computer, you will have to enter your username and password to log into Arch Linux before continuing.


2.

A terminal window with a dark background. The prompt is [wikihow@osboxes ~]\$ and the command sudo pacman -s alsa-utils is entered. The command line is highlighted with a red box. A wikiHow logo is in the bottom right corner.

```
[wikihow@osboxes ~]$ sudo pacman -s alsa-utils
```

Enter the sound package download command. Type in `sudo pacman -S alsa-utils` and press `?Enter`.

3.

A terminal window with a dark background. The prompt is [wikihow@osboxes ~]\$ and the command sudo pacman -s alsa-utils is entered. The password prompt [sudo] password for wikihow: is shown, with the input field highlighted by a red box. A wikiHow logo is in the bottom right corner.

```
[wikihow@osboxes ~]$ sudo pacman -s alsa-utils  
[sudo] password for wikihow: 
```

Enter your root password when prompted. This password may be different than the one that you use to log into your system. Type in your password, then press `?Enter`.

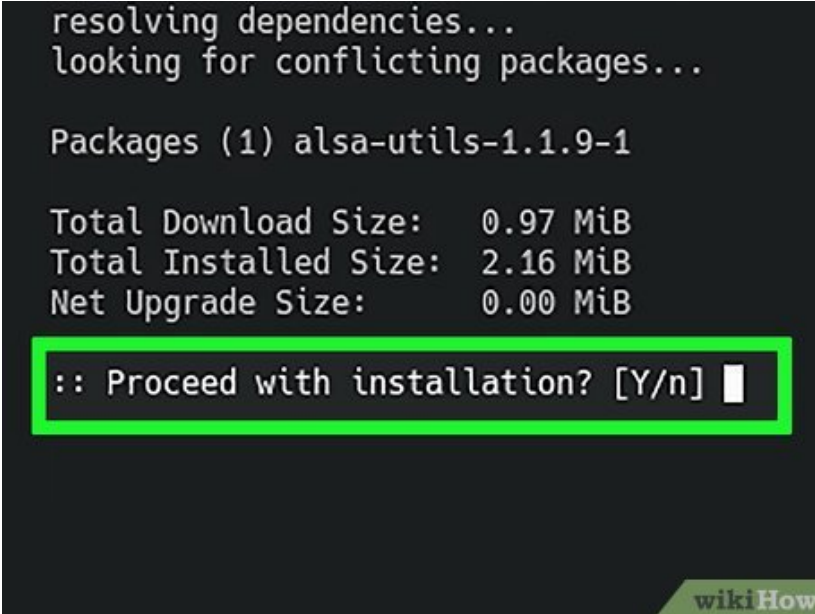
```
resolving dependencies...
looking for conflicting packages...

Packages (1) alsa-utils-1.1.9-1

Total Download Size: 0.97 MiB
Total Installed Size: 2.16 MiB
Net Upgrade Size: 0.00 MiB

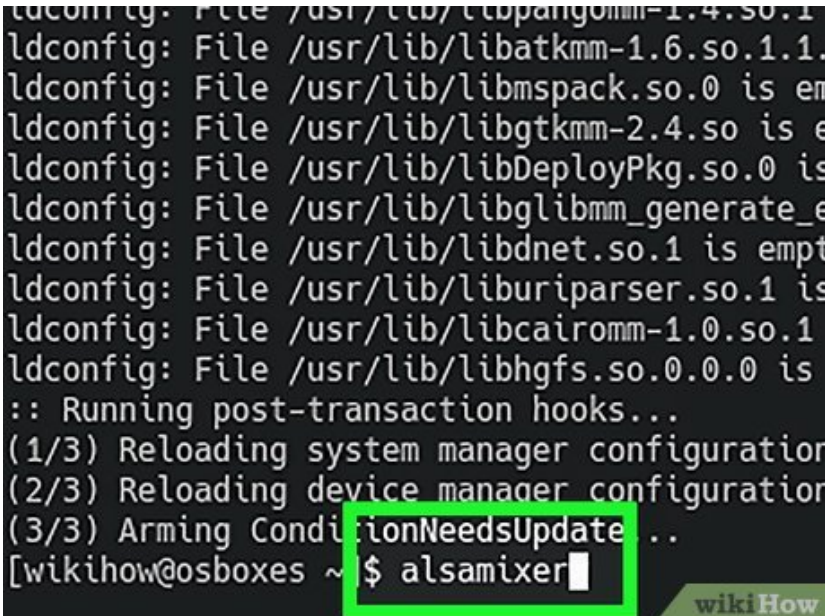
:: Proceed with installation? [Y/n] █
```

4.



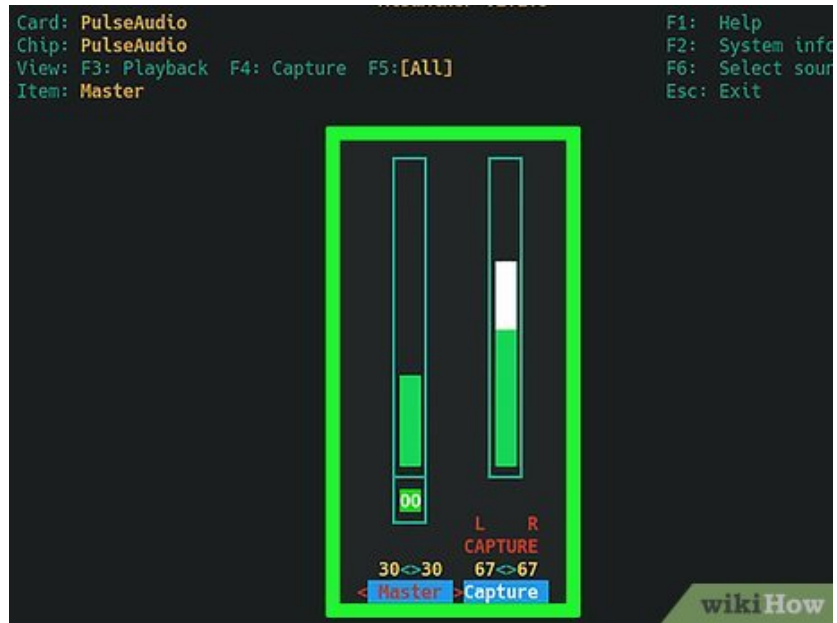
Confirm the download. Type in `y` and press `Enter`. The Arch Linux sound package will begin downloading.

```
ldconfig: File /usr/lib/libpango1mm-1.4.so.1
ldconfig: File /usr/lib/libatkmm-1.6.so.1.1
ldconfig: File /usr/lib/libmispack.so.0 is empty
ldconfig: File /usr/lib/libgtkmm-2.4.so is empty
ldconfig: File /usr/lib/libDeployPkg.so.0 is empty
ldconfig: File /usr/lib/libglibmm_generate_e
ldconfig: File /usr/lib/libdnet.so.1 is empty
ldconfig: File /usr/lib/liburiparser.so.1 is empty
ldconfig: File /usr/lib/libcairomm-1.0.so.1
ldconfig: File /usr/lib/libhgfs.so.0.0.0 is empty
:: Running post-transaction hooks...
(1/3) Reloading system manager configuration
5. (2/3) Reloading device manager configuration
(3/3) Arming ConditionNeedsUpdate...
[wikihow@osboxes ~]$ alsamixer █
```



Enter the sound configuration command. Type in `alsamixer` and press `Enter`. You should see a series of vertical bars appear on your screen.

6.



Configure your computer's sound levels. Select a sound level (e.g., **master**) using the right or left arrow keys, then raise or lower the volume of that level by pressing the up or down arrow key. When you're done setting the levels, press **F6**, select your computer's sound card name, and press **Enter**.

7.



Exit the sound configuration page. Press the **Esc** key to do so.

```
ldconfig: File /usr/lib/libgdkmm-2.4.so is empty, not checked
ldconfig: File /usr/lib/libmtpack.so is empty, not checked
ldconfig: File /usr/lib/libpangomm-1.4.so.1 is empty, not checked
ldconfig: File /usr/lib/libatkmm-1.6.so.1.1.0 is empty, not checked
ldconfig: File /usr/lib/libmtpack.so.0 is empty, not checked
ldconfig: File /usr/lib/libgtkmm-2.4.so is empty, not checked
ldconfig: File /usr/lib/libDeployPkg.so.0 is empty, not checked
ldconfig: File /usr/lib/libglibmm_generate_extra_defs-2.4.so is empty, not checked
ldconfig: File /usr/lib/libdnet.so.1 is empty, not checked
ldconfig: File /usr/lib/liburiparser.so.1 is empty, not checked
ldconfig: File /usr/lib/libcairomm-1.0.so.1 is empty, not checked
ldconfig: File /usr/lib/libhgfs.so.0.0.0 is empty, not checked
:: Running post-transaction hooks...
(1/3) Reloading system manager configuration...
(2/3) Reloading device manager configuration...
8. (3/3) Arming ConditionNeedsUpdate...
[wikihow@osboxes ~]$ alsamixer
[wikihow@osboxes ~]$ alsamixer
[wikihow@osboxes ~]$ speaker-test -c 2
```

Test your speakers. Type in `speaker-test -c 2` and press `Enter`. This will prompt Linux to test your speakers to make sure that they're working properly.

```
Playback device is default
Stream parameters are 48000Hz, S16_LE, 2 channels
Using 16 octaves of pink noise
Rate set to 48000Hz (requested 48000Hz)
Buffer size range from 96 to 1048576
Period size range from 32 to 349526
Using max buffer size 1048576
Periods = 4
was set period_size = 262144
was set buffer_size = 1048576
 0 - Front Left
 1 - Front Right
Time per period = 11.245636
 0 - Front Left
 1 - Front Right
Time per period = 11.241146
 0 - Front Left
^C
```


Complete the process. Press `Ctrl + C` (or `Command + C` on a Mac) to do so.

Part 2 of 3:

Installing the X Window System

1.

```
[wikihou@osboxes ~]$ sudo pacman -S xorg-server xorg-xinit
```



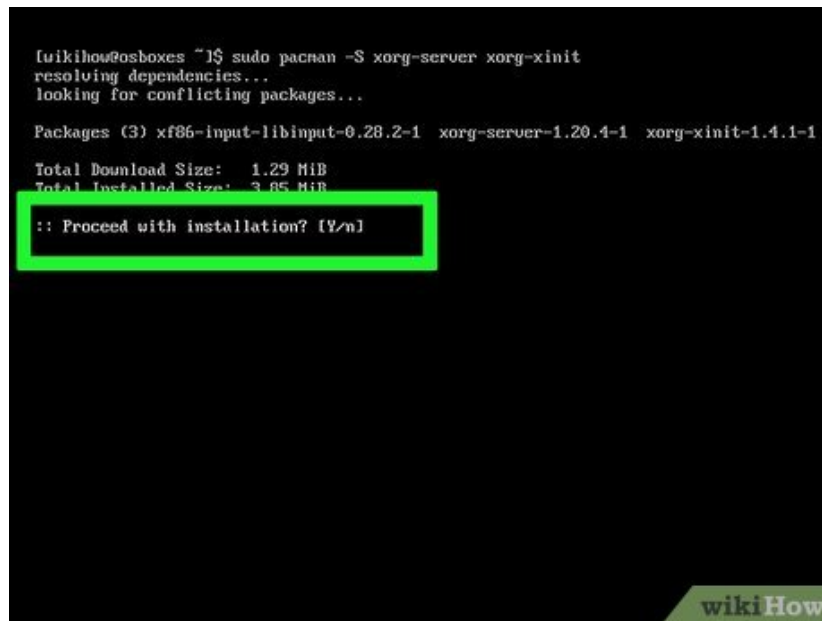
Enter the X Window download command. Before you can install a "desktop environment" (a GUI) on your computer, you'll need to install the base for it. Type `sudo pacman -S xorg-server xorg-xinit xorg-server-utils` into the command line and press `?Enter`.

2.

```
[wikihou@osboxes ~]$ sudo pacman -S xorg-server xorg-xinit
resolving dependencies...
looking for conflicting packages...

Packages (3) xf86-input-libinput-0.28.2-1 xorg-server-1.20.4-1 xorg-xinit-1.4.1-1
Total Download Size: 1.29 MiB
Total Installed Size: 3.85 MiB

:: Proceed with installation? [Y/n]
```



Confirm the download. When prompted, type in `y` and press `?Enter`.

```
ldconfig: File /usr/lib/libgtkmm-2.4.so.1 is empty, not checked.
ldconfig: File /usr/lib/libuntools.so.0.0.0 is empty, not checked.
ldconfig: File /usr/lib/libDeployPkg.so is empty, not checked.
ldconfig: File /usr/lib/libpangomm-1.4.so is empty, not checked.
ldconfig: File /usr/lib/libfuse.so.2 is empty, not checked.
ldconfig: File /usr/lib/libglibmm-2.4.so is empty, not checked.
ldconfig: File /usr/lib/libDeployPkg.so.0.0.0 is empty, not checked.
ldconfig: File /usr/lib/libuntools.so.0 is empty, not checked.
ldconfig: File /usr/lib/libuntools.so is empty, not checked.
ldconfig: File /usr/lib/libguestlib.so.0.0.0 is empty, not checked.
ldconfig: File /usr/lib/libgdkmm-2.4.so is empty, not checked.
ldconfig: File /usr/lib/libmspack.so is empty, not checked.
ldconfig: File /usr/lib/libpangomm-1.4.so.1 is empty, not checked.
ldconfig: File /usr/lib/libatkmm-1.6.so.1.1.0 is empty, not checked.
ldconfig: File /usr/lib/libmspack.so.0 is empty, not checked.
ldconfig: File /usr/lib/libgtkmm-2.4.so is empty, not checked.
ldconfig: File /usr/lib/libDeployPkg.so.0 is empty, not checked.
ldconfig: File /usr/lib/libglibmm_generate_extra_defs-2.4.so.1 is empty
ldconfig: File /usr/lib/libdnet.so.1 is empty, not checked.
ldconfig: File /usr/lib/liburiparser.so.1 is empty, not checked.
ldconfig: File /usr/lib/libcairomm-1.0.so.1 is empty, not checked.
ldconfig: File /usr/lib/libhgfs.so.0.0.0 is empty, not checked.
:: Running post-transaction hooks
(1/1) Arming ConditionNeedsUpdate...
[wikihow@osboxes ~]$ sudo pacman -S xorg-twm xorg-xclock xterm
```

3.

Enter the command to install desktop features. Type in `sudo pacman -S xorg-twm xorg-xclock xterm` and press `?Enter`.

```
ldconfig: File /usr/lib/libmspack.so.0 is empty, not checked.
ldconfig: File /usr/lib/libgtkmm-2.4.so is empty, not checked.
ldconfig: File /usr/lib/libDeployPkg.so.0 is empty, not checked.
ldconfig: File /usr/lib/libglibmm_generate_extra_defs-2.4.so.1 is empty, not checked.
ldconfig: File /usr/lib/libdnet.so.1 is empty, not checked.
ldconfig: File /usr/lib/liburiparser.so.1 is empty, not checked.
ldconfig: File /usr/lib/libcairomm-1.0.so.1 is empty, not checked.
ldconfig: File /usr/lib/libhgfs.so.0.0.0 is empty, not checked.
:: Running post-transaction hooks...
(1/1) Arming ConditionNeedsUpdate...
[wikihow@osboxes ~]$ sudo pacman -S xorg-twm xorg-xclock xterm
resolving dependencies...
looking for conflicting packages...

Packages (4) xbitmaps-1.1.2-1 xorg-twm-1.0.10-1 xorg-xclock-1.0.10-1 xterm-3.5.1-1
Total Download Size: 0.51 MiB
Total Installed Size: 1.57 MiB
Proceed with installation? [Y/n] y
```

4.

Enter your password, then confirm the download. When prompted, type in your root password and press `?Enter`, then type in `y` and press `?Enter`.

```
ldconfig: File /usr/lib/libgdkmm-2.4.so is empty, not checked.
ldconfig: File /usr/lib/libnspack.so is empty, not checked.
ldconfig: File /usr/lib/libpangomm-1.4.so.1 is empty, not checked.
ldconfig: File /usr/lib/libatkmm-1.6.so.1.1.0 is empty, not checked.
ldconfig: File /usr/lib/libnspack.so.0 is empty, not checked.
ldconfig: File /usr/lib/libgtkmm-2.4.so is empty, not checked.
ldconfig: File /usr/lib/libglibmm2.4.so.0 is empty, not checked.
ldconfig: File /usr/lib/libglibmm_generate_extra_defs-2.4.so.1 is empty, not checked.
ldconfig: File /usr/lib/libdnet.so.1 is empty, not checked.
ldconfig: File /usr/lib/libriiparser.so.1 is empty, not checked.
ldconfig: File /usr/lib/libcairomm-1.0.so.1 is empty, not checked.
ldconfig: File /usr/lib/libhdfs.so.0.0.0 is empty, not checked.
.: Running post-transaction hooks...
(L/1) Arming ConditionNeedsUpdate...
[wikihow@osboxes ~]$ sudo pacman -S xorg-tun xorg-xclock xterm
resolving dependencies...
looking for conflicting packages...

Packages (4) xbitmaps-1.1.2-1 xorg-tun-1.0.10-1 xorg-xclock-1.0.8-1 xterm-345-1
Total Download Size: 0.51 MiB
Total Installed Size: 1.57 MiB

Proceed with installation? [Y/n] y
Retrieving packages...
xorg-tun-1.0.10-1-x86_64 96.0 KiB 220K/s 00:00 [#####] 10
ror: failed retrieving file 'xorg-xclock-1.0.8-1-x86_64.pkg.tar.xz' from repo.iut.ac.ir : The requested URL returned error: 404
ror: failed retrieving file 'xorg-xclock-1.0.8-1-x86_64.pkg.tar.xz' from mirrors.gigenet.com : The requested URL returned error: 404
ror: failed retrieving file 'xorg-xclock-1.0.8-1-x86_64.pkg.tar.xz' from ftp.gudg.de : The requested URL returned error: 404
ror: failed retrieving file 'xorg-xclock-1.0.8-1-x86_64.pkg.tar.xz' from mirrors.standaloneinstall.com : The requested URL returned error: 404
ror: failed retrieving file 'xorg-xclock-1.0.8-1-x86_64.pkg.tar.xz' from archmirror.nebalanet.cc : could not resolve host: archmirror.nebalanet.cc
```

5.

Wait for the installation to complete. This may take a few minutes since the packages are being downloaded onto your computer.

```
[wikihow@osboxes ~]$ startx_
```

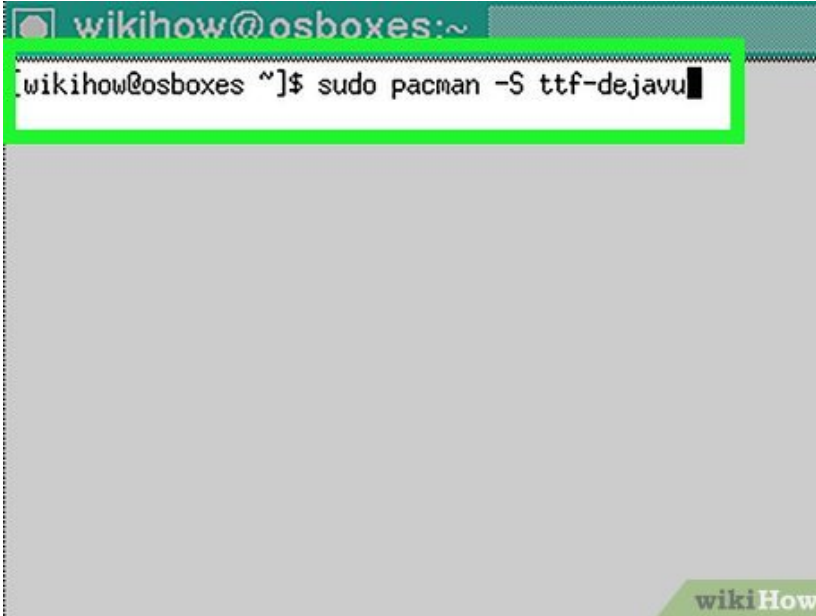
6.

Start the X Window System. Type in `startx` and press `?Enter`. Doing so will open the X Window System command line, from which point you can install the GNOME GUI.

Part 3 of 3:

Installing GNOME

1.




```
wikihow@osboxes:~  
[wikihow@osboxes ~]$ sudo pacman -S ttf-dejavu
```

wikiHow

Enter the DejaVu font download command. This font is crucial for the X Window System to work properly. Type in `sudo pacman -S ttf-dejavu` and press `Enter`.^[1]

2.



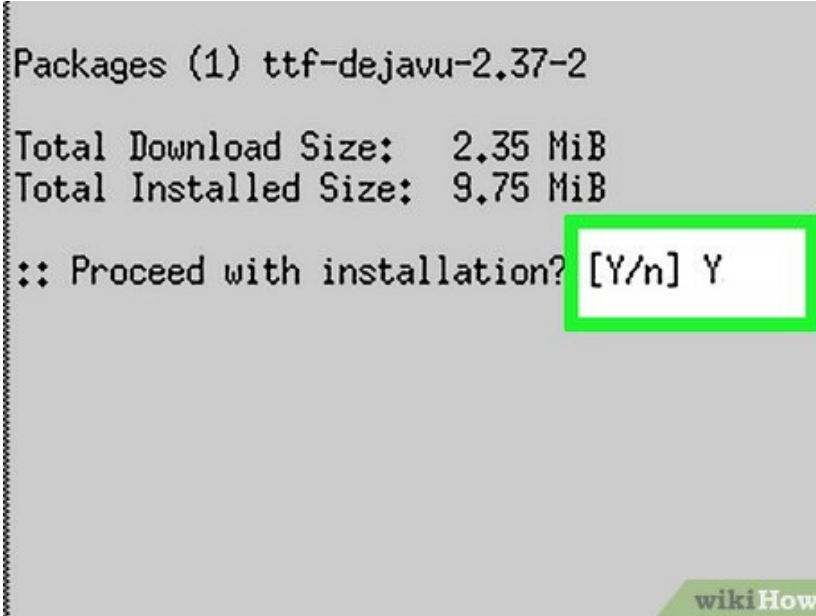
```
wikihow@osboxes:~  
[wikihow@osboxes ~]$ sudo pacman -S ttf-dejavu  
Password: 
```

wikiHow

Enter your root password. When prompted, type in your root password and press `Enter`.

```
Packages (1) ttf-dejavu-2.37-2
Total Download Size: 2.35 MiB
Total Installed Size: 9.75 MiB
:: Proceed with installation? [Y/n] Y
```

3.

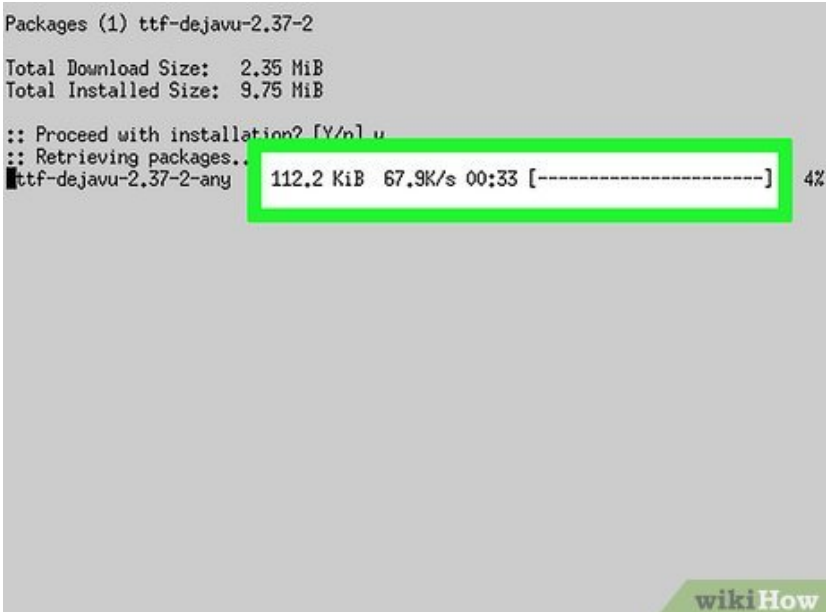


wikiHow

Confirm the download. Type in `y` and press `Enter`.

```
Packages (1) ttf-dejavu-2.37-2
Total Download Size: 2.35 MiB
Total Installed Size: 9.75 MiB
:: Proceed with installation? [Y/n] u
:: Retrieving packages..
ttf-dejavu-2.37-2-any 112.2 KiB 67.9K/s 00:33 [-----] 4%
```

4.




wikiHow

Wait for the font to finish installing. This should only take a few minutes.

```
wikihow@osboxes:~  
wikihow@osboxes ~]$ sudo pacman -S gnome
```

5.



Enter the GNOME download command. Type in `sudo pacman -S gnome` and press `?Enter`

```
21) gnome-font-viewer 22) gnome-getting-started-docs 23) gnome-  
24) gnome-logs 25) gnome-maps 26) gnome-menus 27) gnome-music  
28) gnome-photos 29) gnome-remote-desktop 30) gnome-screenshot  
31) gnome-session 32) gnome-settings-daemon 33) gnome-shell  
34) gnome-shell-extensions 35) gnome-system-monitor 36) gnome-t  
37) gnome-themes-extra 38) gnome-todo 39) gnome-user-docs  
40) gnome-user-share 41) gnome-video-effects 42) gnome-weather  
43) grilo-plugins 44) gvfs 45) gvfs-afc 46) gvfs-goa 47) gvfs  
48) gvfs-gphoto2 49) gvfs-mtp 50) gvfs-nfs 51) gvfs-smb 52) r  
53) mutter 54) nautilus 55) networkmanager 56) orca 57) rygel  
59) totem 60) tracker 61) tracker-miners 62) vino 63) xdg-use  
64) yelp  
:: Repository community  
65) gnome-boxes 66) gnome-software 67) simple-scan  
Enter a selection (default=all):
```


6.



Confirm the download. When prompted, type in `y` and press `?Enter`. GNOME will begin downloading.

1. This process can take anywhere from a couple of minutes to a couple of hours depending on your Internet speed.

7.

A terminal window with a green title bar containing the text 'wikihow@osboxes:~'. The terminal prompt is 'wikihow@osboxes ~]\$' and the command 'sudo pacman -S lxterminal' is being typed. A green rectangular box highlights the command. The terminal background is light gray, and a 'wikiHow' logo is visible in the bottom right corner.

```
wikihow@osboxes ~]$ sudo pacman -S lxterminal
```

Install an updated command line. The GNOME command line doesn't work in several versions of Arch Linux, but you can install a different one to compensate. To do so:

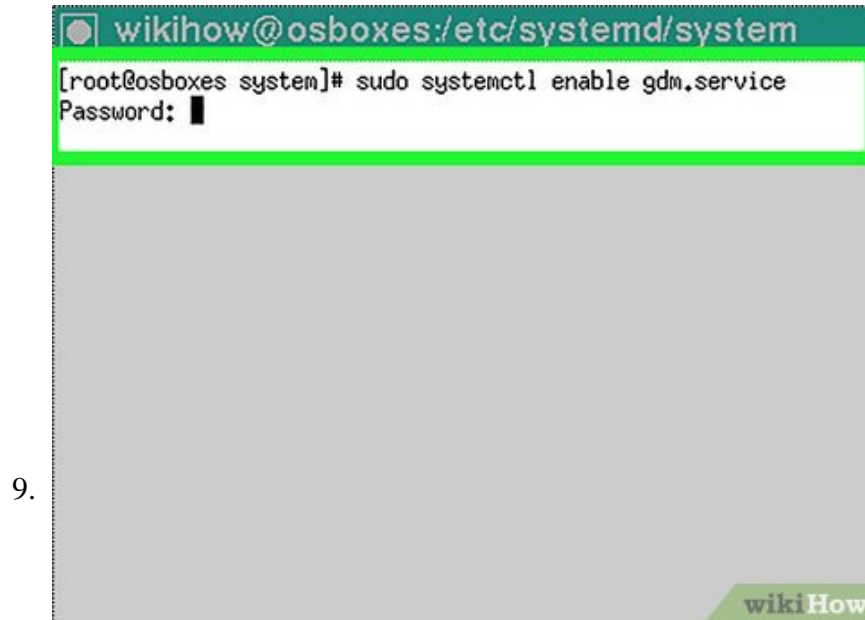
1. Type in `sudo pacman -S lxterminal` and press `?Enter`.
2. Enter your root password when prompted.
3. Type in `y` and press `?Enter`.

8.

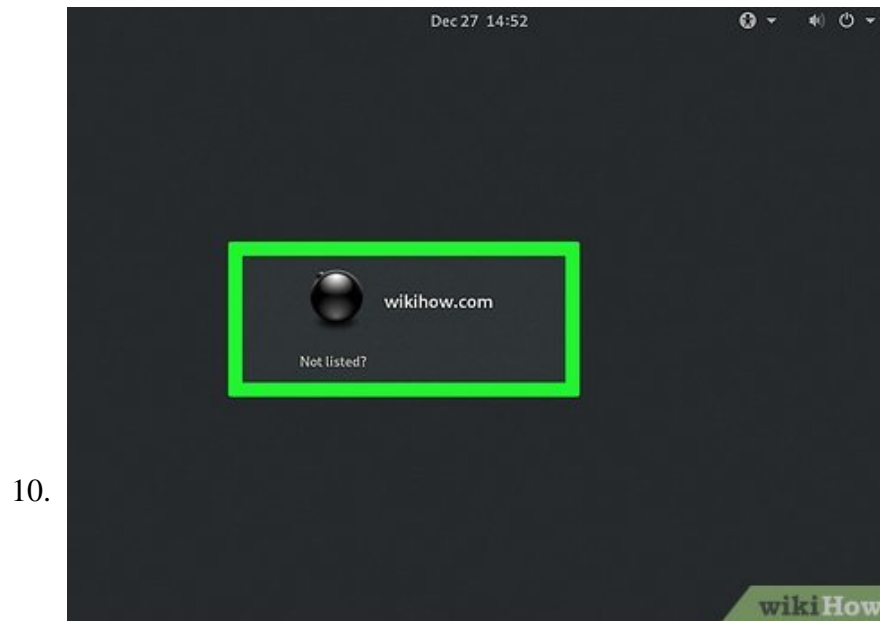
A terminal window with a green title bar containing the text 'wikihow@osboxes:/etc/systemd/system'. The terminal prompt is '[root@osboxes systemd #]' and the command 'sudo systemctl enable gdm.service' is being typed. A green rectangular box highlights the command. The terminal background is light gray, and a 'wikiHow' logo is visible in the bottom right corner.

```
[root@osboxes systemd # sudo systemctl enable gdm.service
```

Enable the display manager. Type in `sudo systemctl enable gdm.service` and press `?Enter`.



Enter your password when prompted. You'll have to enter your root password at least twice during the display manager authentication. Once you see the phrase "AUTHENTICATION COMPLETE" at the bottom of the page, you can proceed.



Reboot your computer. Type in `reboot` and press `Enter`. Your computer will restart itself; once it finishes rebooting, you should be greeted with a login page where you can select your name using the mouse, enter your password, and proceed into your newly interfaced computer desktop.

You finished reading the article "**How to Install Gnome on Arch 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.