

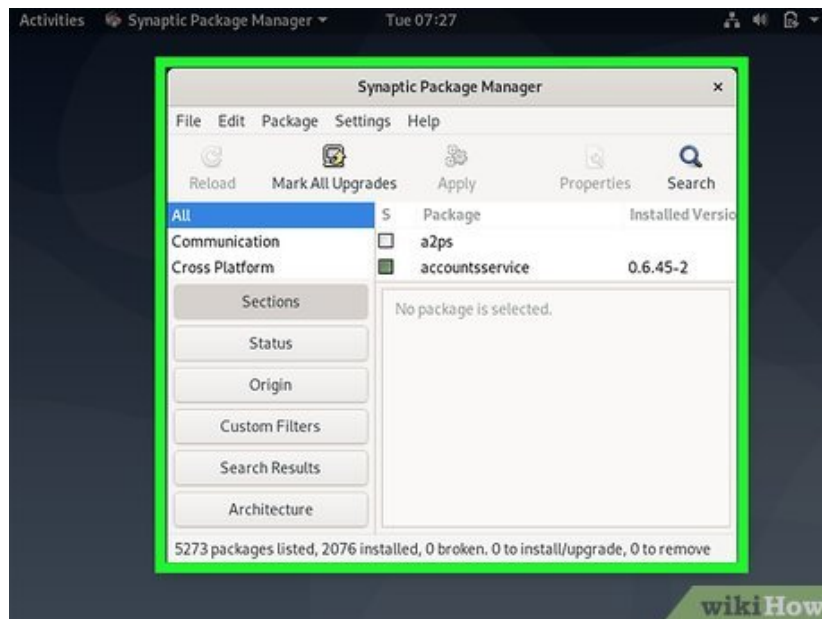
How to Install Software in Debian Linux

This wikiHow teaches you how to use tools built into Debian Linux to install software packages. If you're using the desktop version of Debian, you can use Synaptic to install application packages with a point-and-click graphical interface....

Method 1 of 3:

Using a Graphical Package Manager

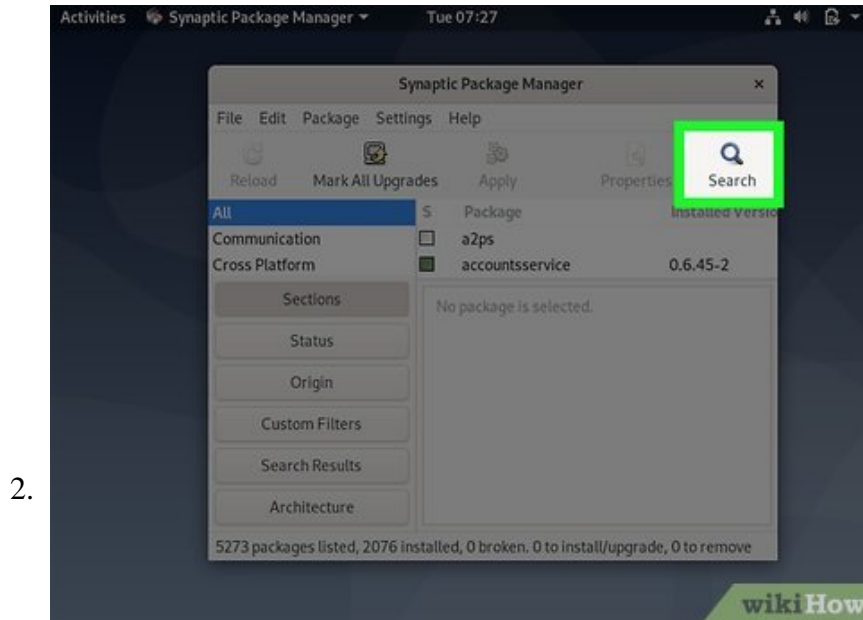
1.



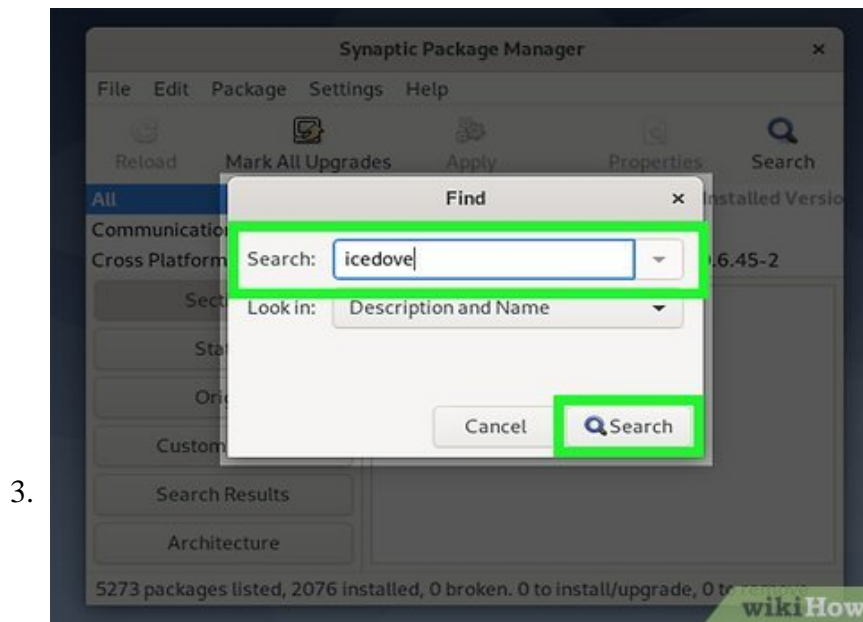
Open the Synaptic graphical package manager. Synaptic comes preinstalled in Debian as long as you've installed the version with desktop support.^[1] You'll find it in your **Applications** menu, or under **System > Administration**. If you want to use a different graphical package manager, open that instead—most work similarly.

1. You can also run Synaptic from the command line using `sudo synaptic`.

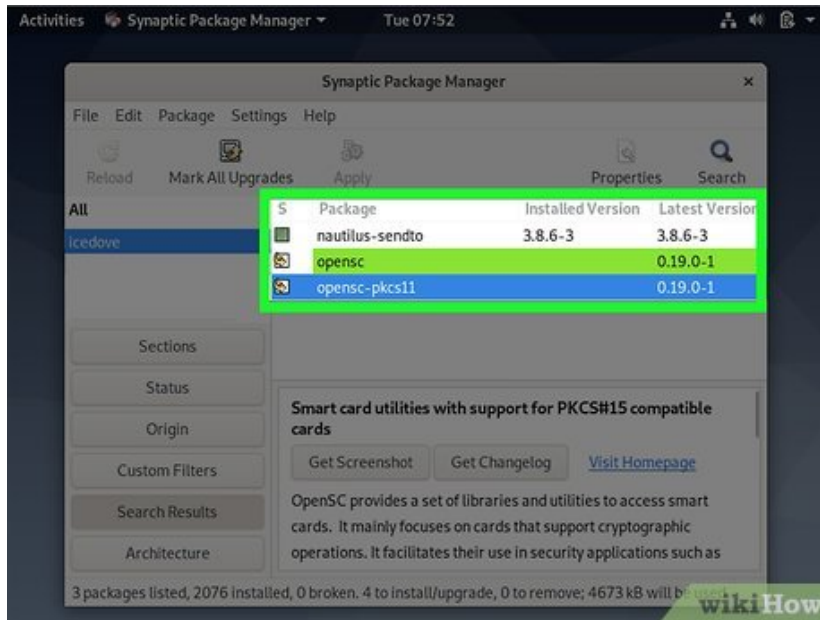
Tip: If you can't find any graphical package manager, consider installing one through the command line, for example, one of the following: KPackage, Klik, Autopackage, Bitnami, Click N Run.



Click **Search**. It's the magnifying glass icon near the top of the window.

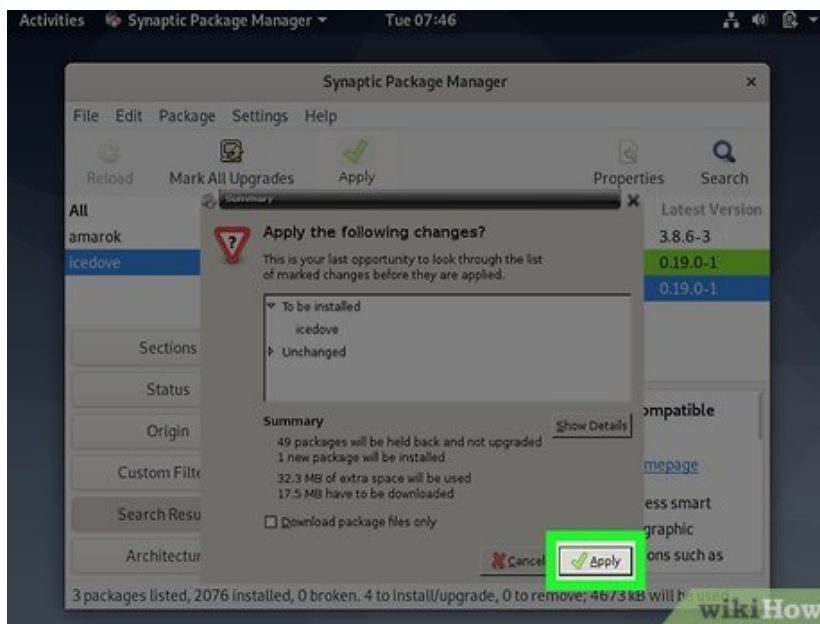


Search for the software you want to install. You can use the search bar to find something in particular or browse the list by category.



4.

Select the package(s) you want to install. Check the box next to the name of any package you want to install. You can install multiple packages at once if you wish.



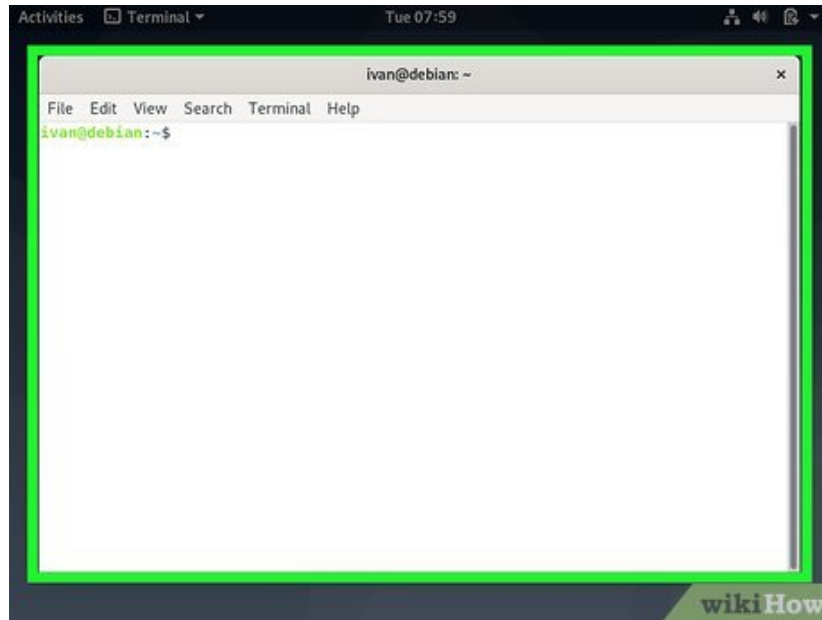
5.

Click the **Apply** button. It's at the bottom of the window. Synaptic will now download and install the selected packages.

Method 2 of 3:

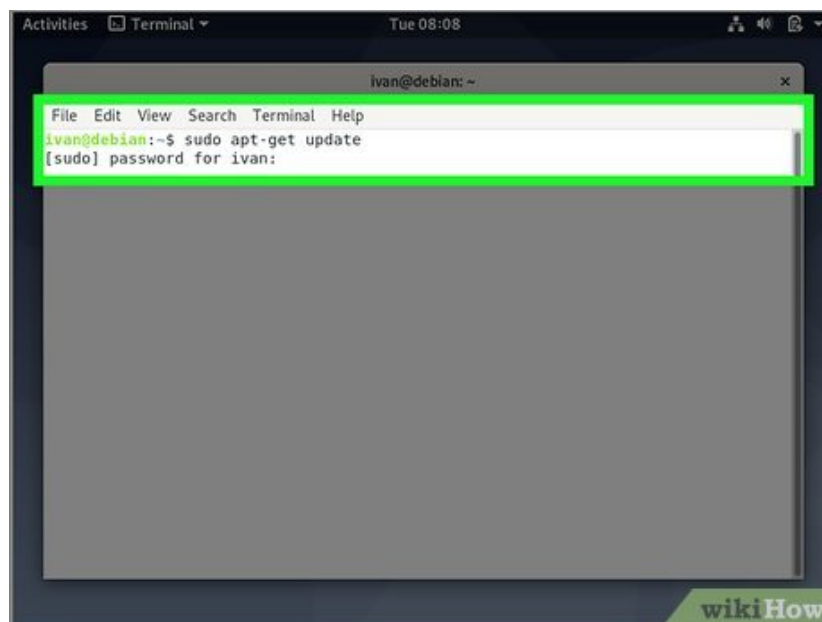
Using Apt

1.

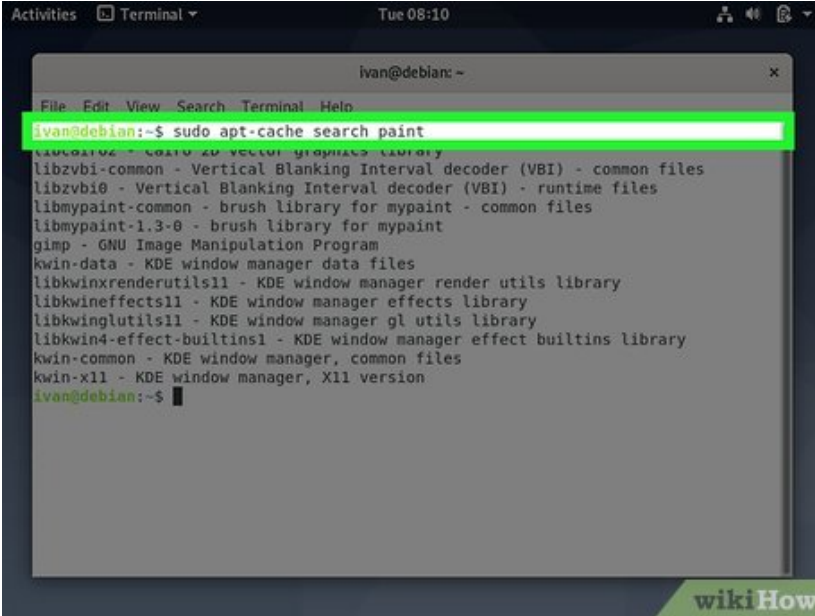


Open a terminal. If you're using a graphical user interface (GUI), you can usually do this by clicking the terminal icon or by pressing `Ctrl` + `Alt` + `T`.

2.



Run `sudo apt-get update` to update the package manager. After typing that command at the prompt, press `Enter` or `Return` to run it. After verifying your root password, the package manager will update to include the latest software sources.^[2]

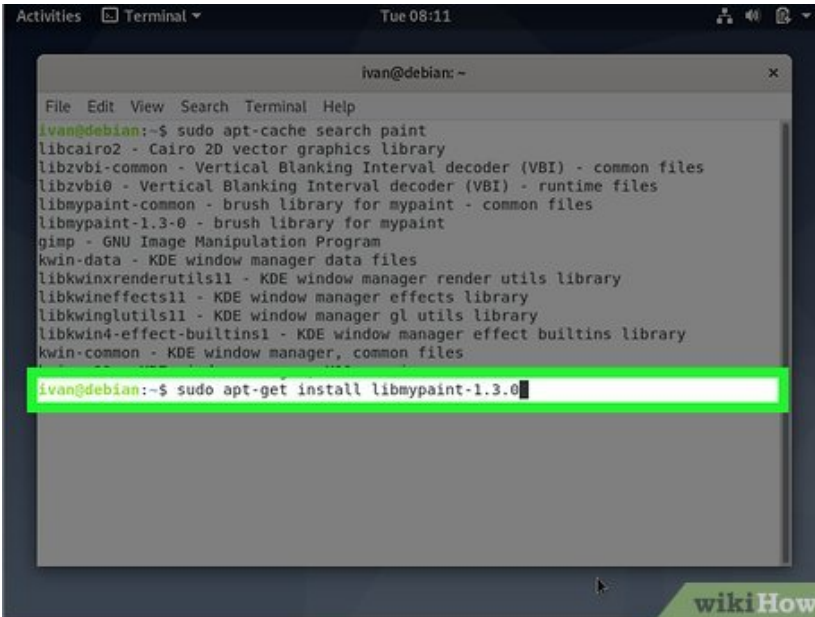


```
ivan@debian: ~  
File Edit View Search Terminal Help  
ivan@debian:~$ sudo apt-cache search paint  
libcairo2 - Cairo 2D vector graphics library  
libzvb1-common - Vertical Blanking Interval decoder (VBI) - common files  
libzvb10 - Vertical Blanking Interval decoder (VBI) - runtime files  
libmypaint-common - brush library for mypaint - common files  
libmypaint-1.3-0 - brush library for mypaint  
gimp - GNU Image Manipulation Program  
kwin-data - KDE window manager data files  
libkwinxrenderutils11 - KDE window manager render utils library  
libkwineffects11 - KDE window manager effects library  
libkwinglutils11 - KDE window manager gl utils library  
libkwin4-effect-builtins1 - KDE window manager effect builtins library  
kwin-common - KDE window manager, common files  
kwin-x11 - KDE window manager, X11 version  
ivan@debian:~$
```

3.

Search for the package you want to install. If you already know the exact name of the package you want to install, skip to the next step. Otherwise, run `apt-cache search softwareName` (with `softwareName` being the name of your software) at the prompt.

1. This can sometimes print out a lot of options, of which many are irrelevant. Be patient and read the description of every package to determine which one you want to install. If you're unsure, you can also use `apt show packageName`, with `packageName` being the name of any listed package, to get a longer description of what the package is.
2. If you're unsure what your software is called, you might try searching for a word that describes what the package does. For example, typing `apt-cache search paint` will print the package names of many painting programs, including GIMP and Krita.



```
ivan@debian: ~  
File Edit View Search Terminal Help  
ivan@debian:~$ sudo apt-cache search paint  
libcairo2 - Cairo 2D vector graphics library  
libzvb1-common - Vertical Blanking Interval decoder (VBI) - common files  
libzvb10 - Vertical Blanking Interval decoder (VBI) - runtime files  
libmypaint-common - brush library for mypaint - common files  
libmypaint-1.3-0 - brush library for mypaint  
gimp - GNU Image Manipulation Program  
kwin-data - KDE window manager data files  
libkwinxrenderutils11 - KDE window manager render utils library  
libkwineffects11 - KDE window manager effects library  
libkwinglutils11 - KDE window manager gl utils library  
libkwin4-effect-builtins1 - KDE window manager effect builtins library  
kwin-common - KDE window manager, common files  
ivan@debian:~$ sudo apt-get install libmypaint-1.3.0
```

4.

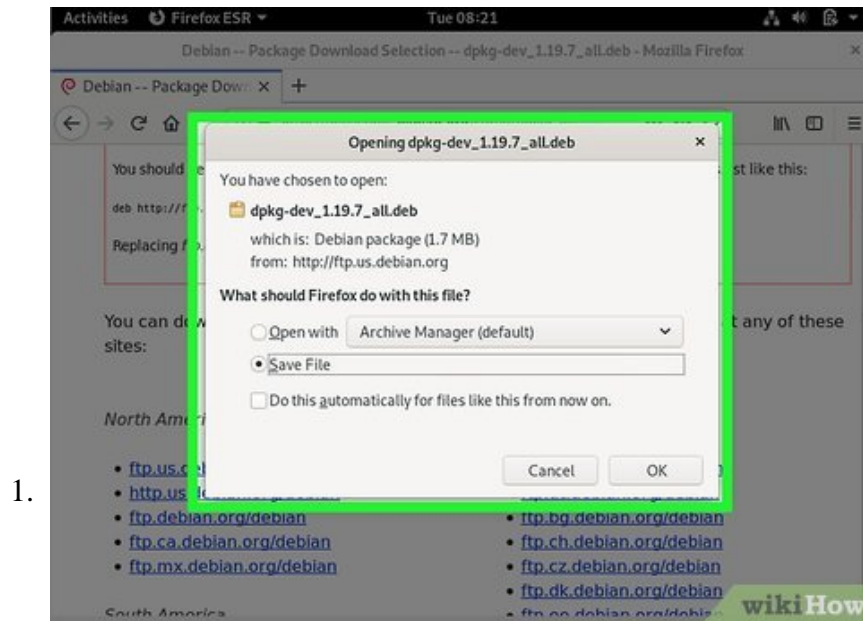
Run `sudo apt-get install packageName` to install the package. Replace `packageName` with the actual package name. For example, if you want to install the package `dillo`

(that's a web browser), you would type `sudo apt-get install dillo`.

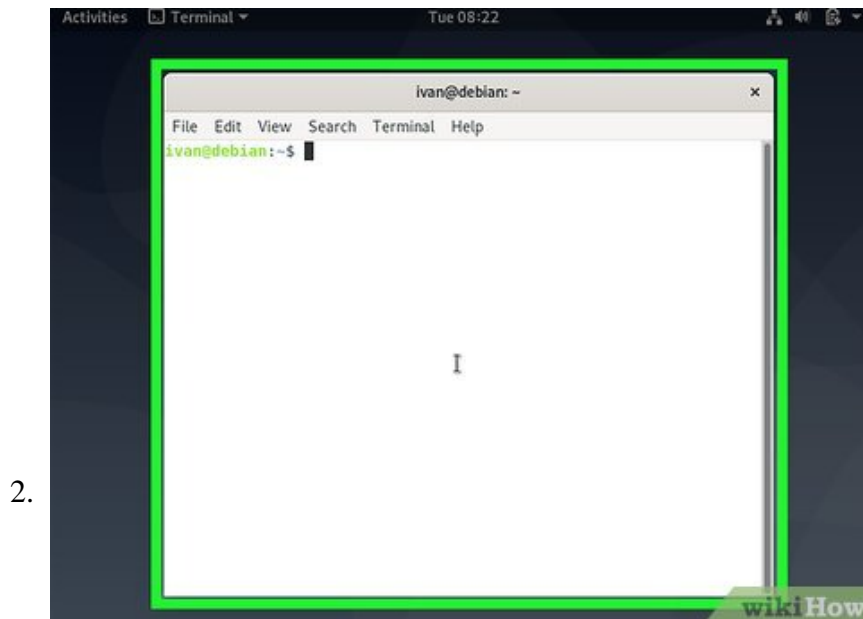
1. If additional dependencies are required for the package to install, follow the on-screen instructions to choose whether to install them now.
2. To remove an installed package, use `sudo apt-get remove packageName`.^[3]

Method 3 of 3:

Using Dpkg

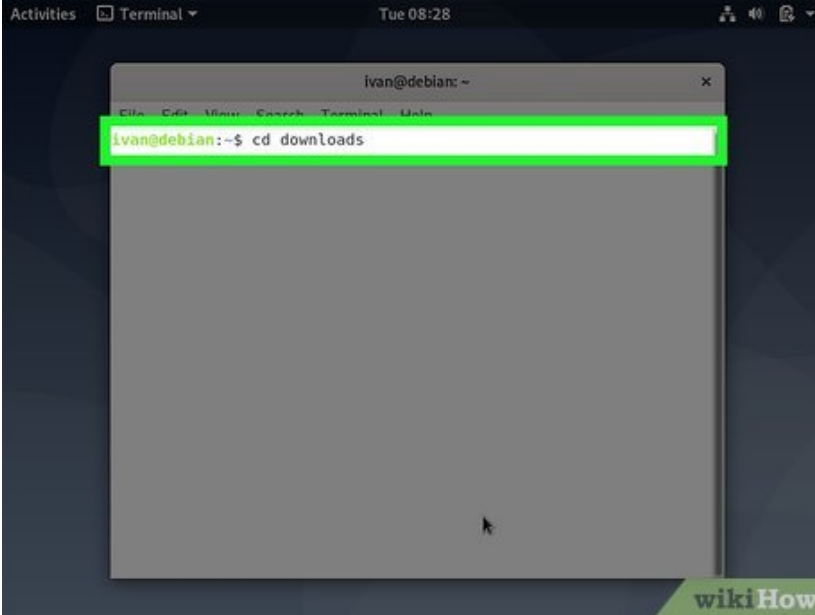


Download a package file. If you want to install a package that ends with the `.deb` file extension, you can use a built-in tool called `dpkg`.^[4] Start by downloading the desired `*.deb` file from your preferred source.



Open a terminal. If you're using a graphical user interface (GUI), you can usually do this by clicking the terminal icon or by pressing `Ctrl + Alt + T`.

3.

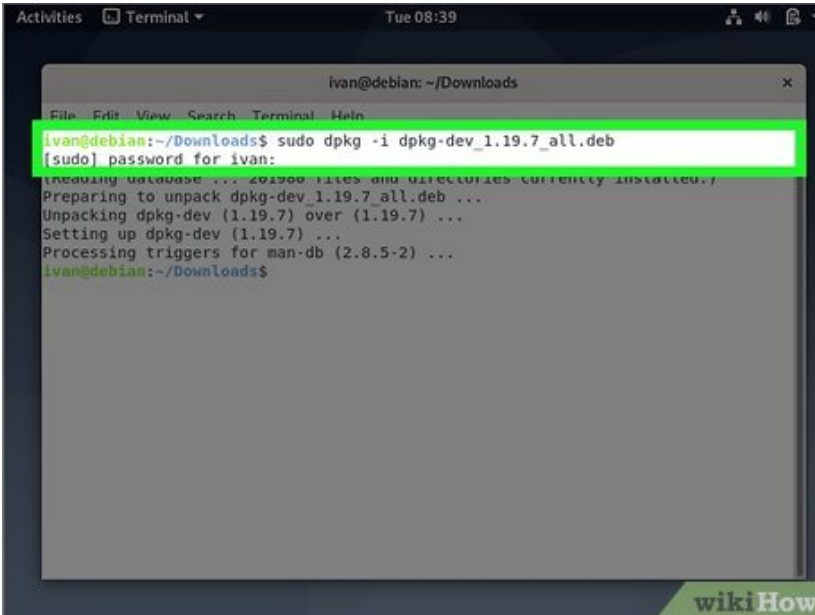


```
ivan@debian: ~  
ivan@debian:~$ cd downloads
```

The screenshot shows a terminal window titled 'ivan@debian: ~'. The command prompt is 'ivan@debian:~\$' and the command 'cd downloads' has been entered and is highlighted with a green box. The terminal window is part of a desktop environment with a top bar showing 'Activities', 'Terminal', and the date 'Tue 08:28'. A 'wikiHow' logo is visible in the bottom right corner of the terminal window.

Use `cd` to enter the directory of the downloaded file. For example, if you've saved the file to a folder in your local directory called `downloads`, type `cd downloads` and press `Enter` or `Return`.

4.



```
ivan@debian: ~/Downloads  
ivan@debian:~/Downloads$ sudo dpkg -i dpkg-dev_1.19.7_all.deb  
[sudo] password for ivan:  
(Reading database ... 20100 files and directories currently installed.)  
Preparing to unpack dpkg-dev_1.19.7_all.deb ...  
Unpacking dpkg-dev (1.19.7) over (1.19.7) ...  
Setting up dpkg-dev (1.19.7) ...  
Processing triggers for man-db (2.8.5-2) ...  
ivan@debian:~/Downloads$
```

The screenshot shows a terminal window titled 'ivan@debian: ~/Downloads'. The command prompt is 'ivan@debian:~/Downloads\$' and the command 'sudo dpkg -i dpkg-dev_1.19.7_all.deb' has been entered and is highlighted with a green box. The terminal window is part of a desktop environment with a top bar showing 'Activities', 'Terminal', and the date 'Tue 08:39'. A 'wikiHow' logo is visible in the bottom right corner of the terminal window.

Run `sudo dpkg -i packageName`. Replace `packageName` with the full name of the package ending in `.deb`. This installs the software package.

1. For example, to install a package called `icewm_0.8.11-2.deb`, type `sudo dpkg -i icewm_0.8.11-2.deb` and press `Enter` or `Return`.
2. Type your root password when prompted to complete the command.

You finished reading the article "**How to Install Software in Debian 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.

