

# How to Install Java on Linux

This wikiHow teaches you how to install the latest version of the Java Runtime Environment (JRE) on a computer running Linux. Open the [https://www.java.com/en/download/linux\_manual.jsp Java for Linux download page]. You'll see several...

Method 1 of 4:

## Installing on Non-RPM Linux



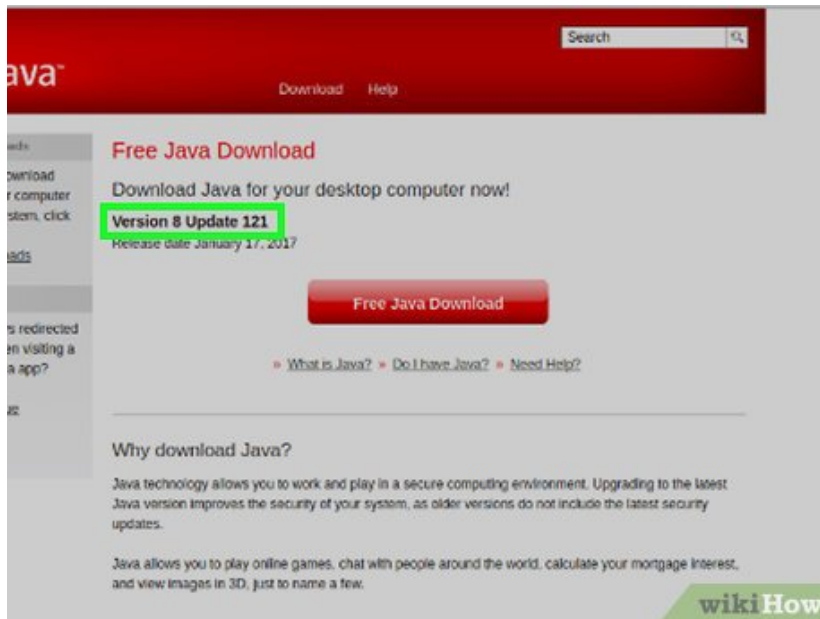
Open the Java for Linux download page. You'll see several options listed here.



2.

Click [Linux](#). It's a link in the middle of the page. Doing so will prompt the Java installation file to download.

1. You can also click the **Linux X64** version if you want to install 64-bit Java.

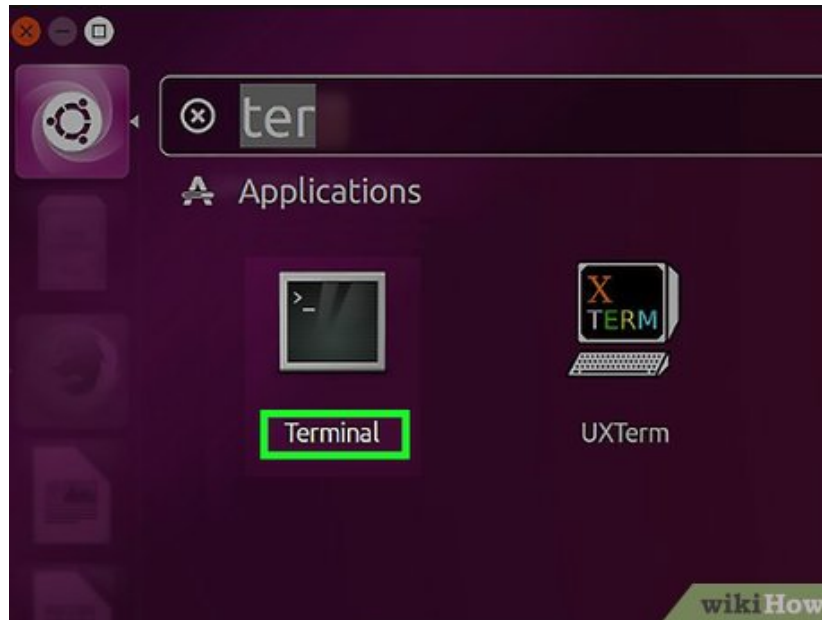


3.

**Note the file's name.** The latest version of Java is version 8, but you also need the update version number, which is written in the file name after the "8u" section.

1. For example, your file might be named "jre-8u151", signifying that it is version 8, update 151.

4.



**Open the command line.** This step will vary depending on your version of Linux, but you can usually find the command line by opening the Terminal app or by clicking a bar at the top or bottom of the screen.

5.

```
charlie
File Edit View Search Terminal Help
charlie@charlie:~$ cd /usr/java
charlie@charlie:/usr/java$ java -version

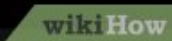
Command 'java' not found, but can be installed with:

sudo apt install default-jre
sudo apt install openjdk-11-jre-headless
sudo apt install openjdk-8-jre-headless

charlie@charlie:/usr/java$ sudo update-alternatives --ins
[sudo] password for charlie:
update-alternatives: using /usr/java/jdk-10.0.2/bin/java
charlie@charlie:/usr/java$ sudo update-alternatives --ins
update-alternatives: using /usr/java/jdk-10.0.2/bin/javac
charlie@charlie:/usr/java$ sudo update-alternatives --ins
1
update-alternatives: using /usr/java/jdk-10.0.2/bin/javaw
charlie@charlie:/usr/java$ java -version
```

**Change the installation directory.** Type `cd` into console, press the spacebar once, and then type in the path (e.g., `/usr/java/` and press `Enter`).

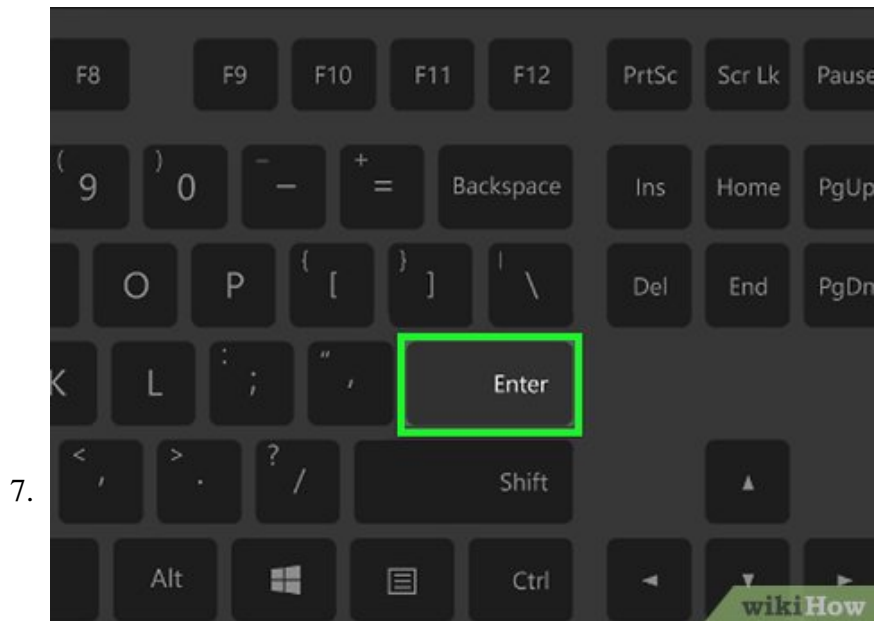
```
[root@ip-172-31-25-239 java]# ls
jdk-8u141-linux-x64.tar.gz
[root@ip-172-31-25-239 java]# tar -zxvf jdk-8u141-
gzip: stdin: not in gzip format
tar: Child returned status 1
tar: Error is not recoverable: exiting now
[root@ip-172-31-25-239 java]# tar -xvf jdk-8u141-
gzip: stdin: not in gzip format
tar: Child returned status 1
tar: Error is not recoverable: exiting now
[root@ip-172-31-25-239 java]# file jdk-8u141-li
jdk-8u141-linux-x64.tar.gz: HTML document, ASCII
g lines, with CRLF line terminators
[root@ip-172-31-25-239 java]# clear
```



6.

**Enter the installation command.** Type in `tar zxvf`, press the spacebar once, and then type in the full file name. This will vary depending on the Java version and when you downloaded it.

1. As of October 2017, you'd type in `tar zxvf jre-8u151-linux-i586.tar`.



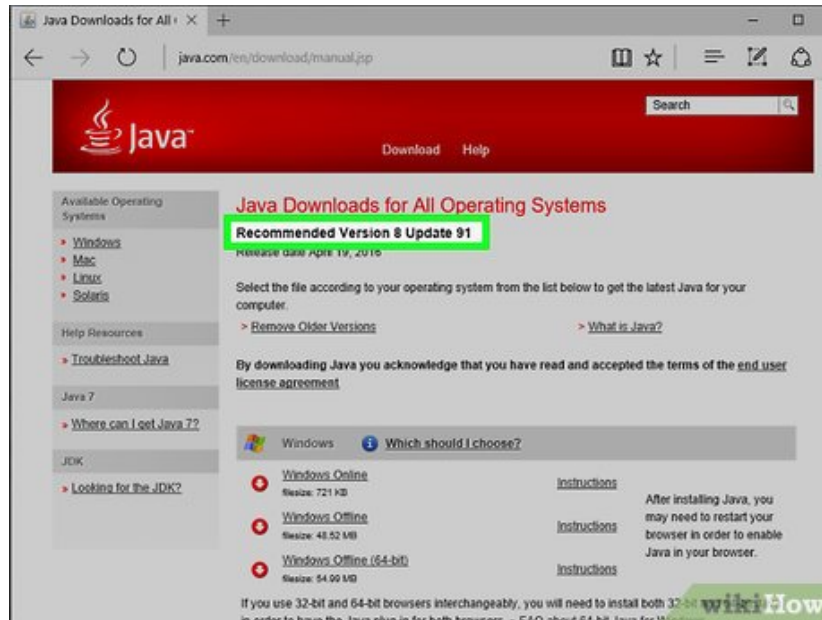
**Press ? Enter**. Doing so will install Java on your computer in a folder entitled "jre1.8.0\_[update]" where "[update]" is the update version number (e.g., 151).

Method 2 of 4:

## Installing on RPM Linux



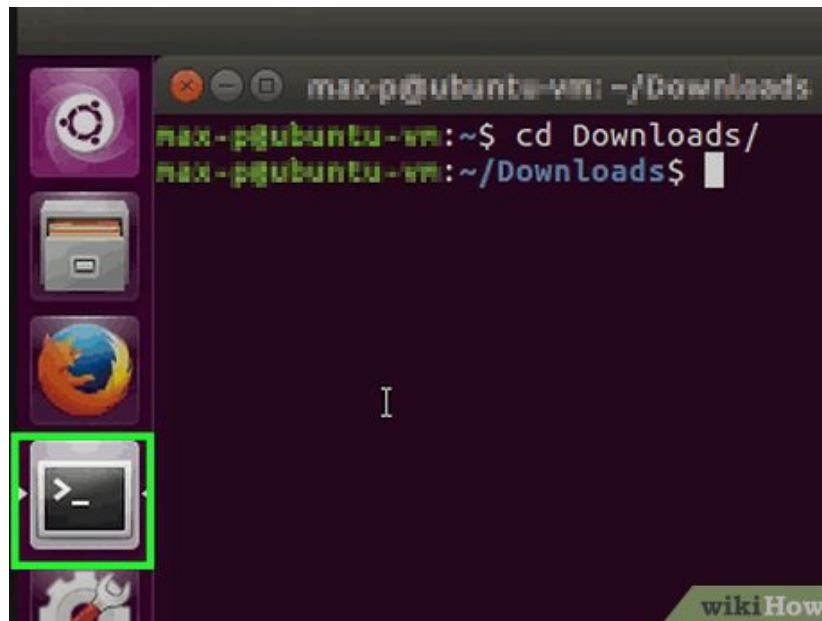
3.



**Note the file's name.** The latest version of Java is version 8, but you also need the update version number, which is written in the file name after the "8u" section.

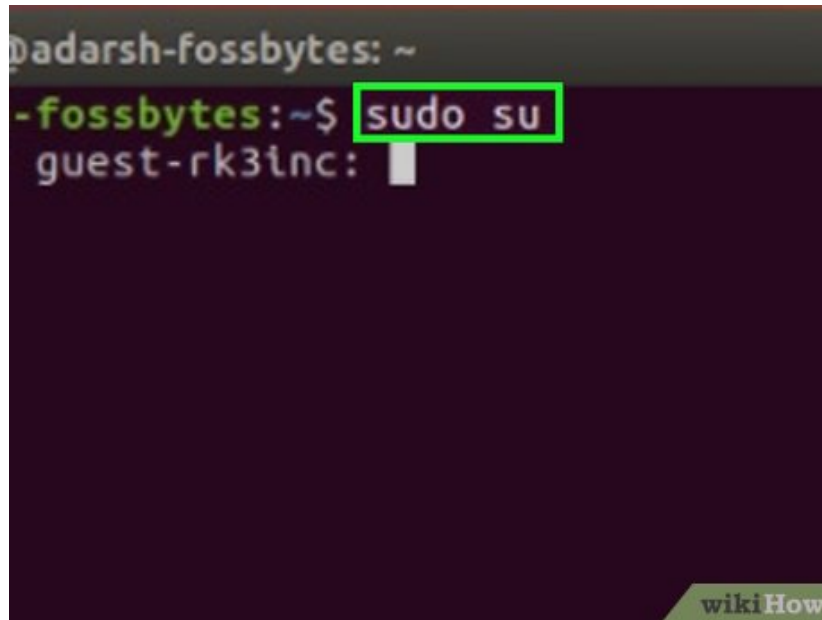
1. For example, your file might be named "jre-8u151", signifying that it is version 8, update 151.

4.



**Open the command line.** This step will vary depending on your version of Linux, but you can usually find the command line by opening the Terminal app or by clicking a bar at the top or bottom of the screen.

5.



```
adarsh-fossbytes: ~  
-fossbytes:~$ sudo su  
guest-rk3inc: |
```

A terminal window with a dark purple background. The prompt is 'adarsh-fossbytes: ~'. The user has entered '-fossbytes:~\$ sudo su' and the command is highlighted with a green box. Below it, the prompt 'guest-rk3inc:' is visible with a cursor. A 'wikiHow' logo is in the bottom right corner.

**Enter the root command.** Type in `sudo su` and press `?Enter`. This will prompt the command line to request your user password.<sup>[1]</sup>

6.



```
Waldo% sudo su -  
Password: |
```

A terminal window with a black background. The prompt is 'Waldo% sudo su -'. The user has entered 'Password:' and the text is highlighted with a green box. A 'wikiHow' logo is in the bottom right corner.

**Enter your account password.** Type in the password for your account and press `?Enter`. As long as you have root access on your account, doing so will allow you to install Java.

1. If you don't have root access on your account, you'll need to enter the password for an account that does have root access.

```

charlie
File Edit View Search Terminal Help
charlie@charlie:~$ cd /usr/java
charlie@charlie:/usr/java$ java -version

Command 'java' not found, but can be installed with:

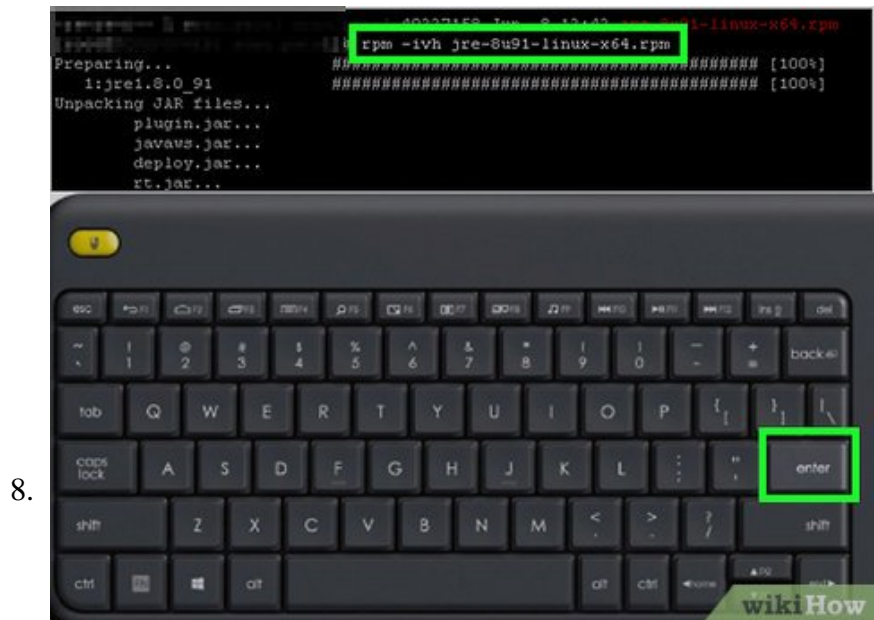
sudo apt install default-jre
sudo apt install openjdk-11-jre-headless
sudo apt install openjdk-8-jre-headless

charlie@charlie:/usr/java$ sudo update-alternatives --ins
[sudo] password for charlie:
update-alternatives: using /usr/java/jdk-10.0.2/bin/java
charlie@charlie:/usr/java$ sudo update-alternatives --ins
update-alternatives: using /usr/java/jdk-10.0.2/bin/javac
charlie@charlie:/usr/java$ sudo update-alternatives --ins
1
update-alternatives: using /usr/java/jdk-10.0.2/bin/javaw
charlie@charlie:/usr/java$ java -version

```

7.

**Change the installation directory.** Type `cd` into console, press the spacebar once, and then type in the path (e.g., `/usr/java/` and press `?Enter`).



8.

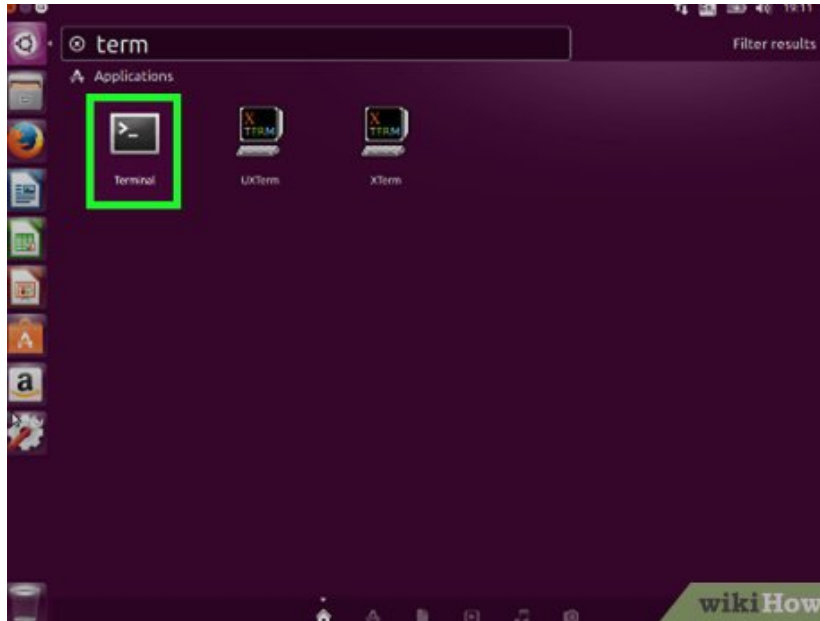
**Enter the installation command.** Type in `rpm -ivh`, press the spacebar once, type in the full file name, and press `?Enter`. This will install Java on your computer.

1. The file name will depend on when you downloaded the file. As of October 2017, you'd type in `rpm -ivh jre-8u151-linux-i586.rpm` and press `?Enter`.

9. **Upgrade the download.** Type in `rpm -Uvh jre-8u73-linux-i586.rpm` and press `?Enter`. This will check for updates for the Java package and, if possible, apply them.

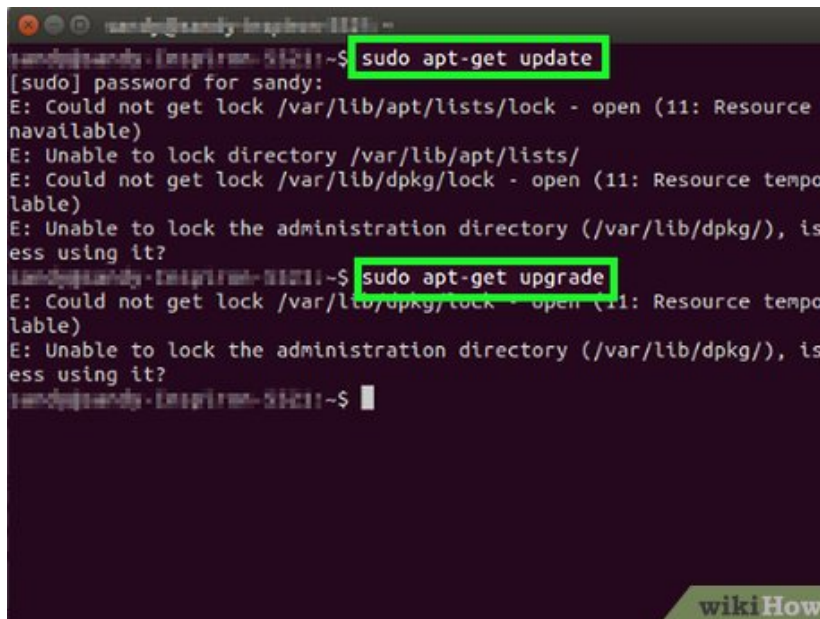
Method 3 of 4:

## Installing on Ubuntu (OpenJDK)



1.

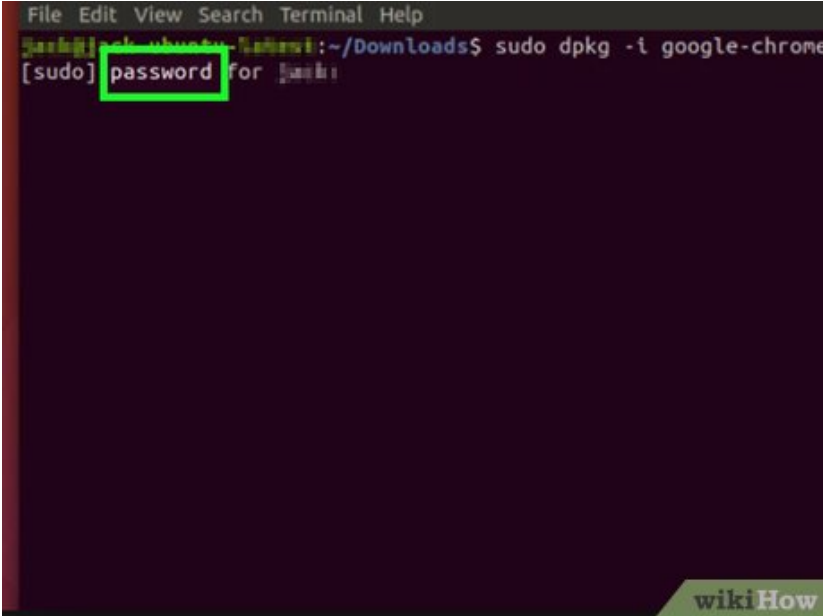
**Open the command line.** Press `Ctrl + Alt + T` on the keyboard, or click the black box icon with a white ">\_" on it on the left side of the screen.



2.

**Enter the update command.** Type in `sudo apt-get update && sudo apt-get upgrade -y` and press `Enter`. This will refresh the package list and install all available updates for you.

3.

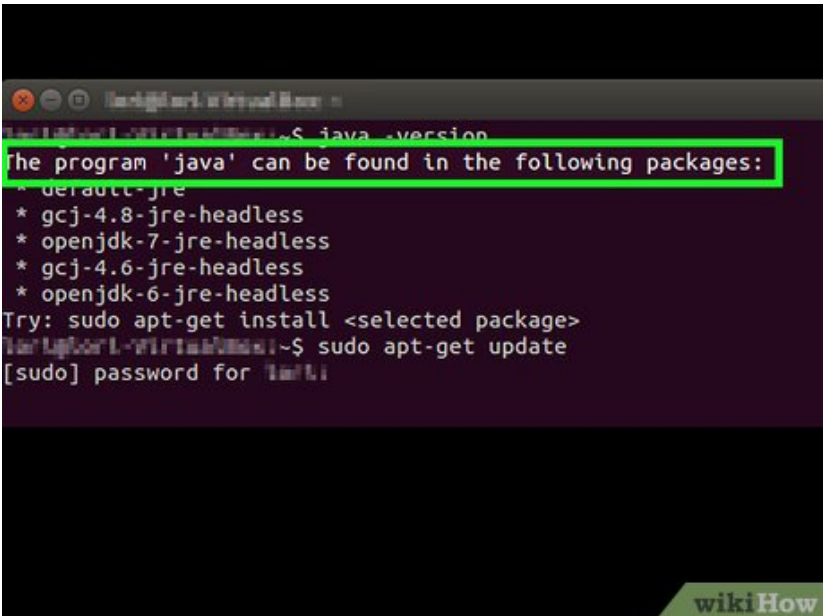


```
File Edit View Search Terminal Help
jashu@ubuntu:~/Downloads$ sudo dpkg -i google-chrome
[sudo] password for jashu:
```

wikiHow

**Enter your password if prompted.** If asked for your user password, type it in and press `? Enter`.

4.



```
ubuntu@ubuntu:~$ java -version
The program 'java' can be found in the following packages:
 * default-jre
 * gcj-4.8-jre-headless
 * openjdk-7-jre-headless
 * gcj-4.6-jre-headless
 * openjdk-6-jre-headless
Try: sudo apt-get install <selected package>
ubuntu@ubuntu:~$ sudo apt-get update
[sudo] password for ubuntu:
```

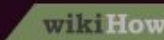
wikiHow

**Make sure that you don't have Java already installed.** Type in `java -version` and press `? Enter`. If you see a line that says "The program 'java' can be found in the following packages" appear, Java is not installed on your computer.

1. If Java is installed, you'll see a line that reports the current version of Java instead.

```
File Edit View Search Terminal Help
d@ubuntu-jump:~$ sudo apt-get install default-jre
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  ca-certificates-java default-jre-headless fonts-dejavu-extra java-common
  libatk-wrapper-java libatk-wrapper-java-jni libgif7 openjdk-8-jre
  openjdk-8-jre-headless
Suggested packages:
  default-java-plugin icedtea-8-plugin fonts-ipafont-gothic
  fonts-ipafont-mincho fonts-wqy-microhei fonts-wqy-zenhei
The following NEW packages will be installed:
  ca-certificates-java default-jre default-jre-headless fonts-dejavu-extra
  java-common libatk-wrapper-java libatk-wrapper-java-jni libgif7
  openjdk-8-jre openjdk-8-jre-headless
0 upgraded, 10 newly installed, 0 to remove and 11 not upgraded.
Need to get 29.4 MB of archives.
After this operation, 108 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

5.

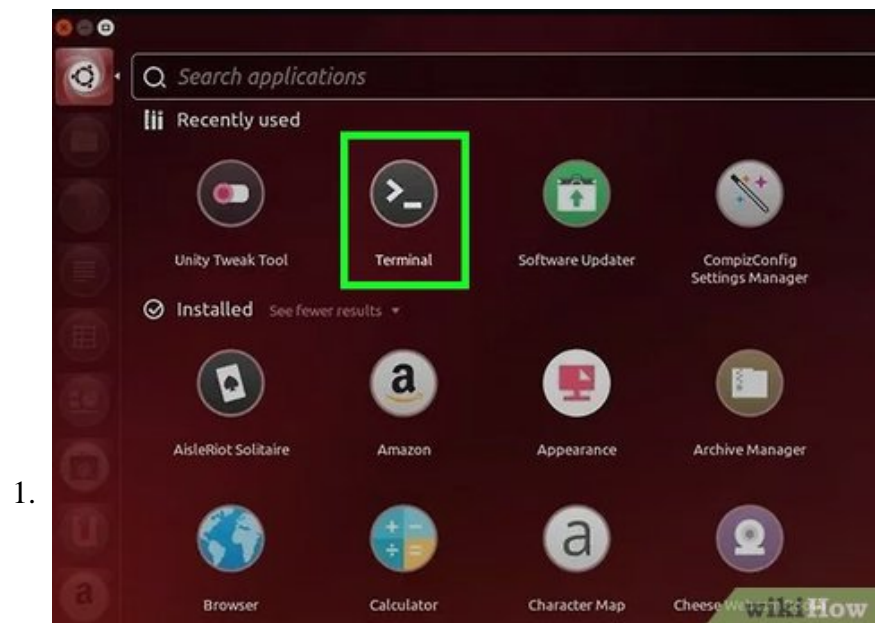


**Type in the installation command.** Type `sudo apt-get install default-jre` into the command line, then press `Enter`. This will install Java on your Ubuntu computer in the default directory.

1. If this doesn't work, try entering `sudo apt-get install openjdk-8-jdk` instead

Method 4 of 4:

## Installing on Ubuntu 16.04 via PPAs



**First of all, this is a 3rd party package, your distro's maintainer can't audit this package, use with caution.** That being said, first open a terminal by pressing `Ctrl + Alt + T`.

```
sandy@sandy: ~$ sudo apt-get update
[sudo] password for sandy:
E: Could not get lock /var/lib/apt/lists/lock - open (11: Resource temporarily unavailable)
E: Unable to lock directory /var/lib/apt/lists/
E: Could not get lock /var/lib/dpkg/lock - open (11: Resource temporarily unavailable)
E: Unable to lock the administration directory (/var/lib/dpkg/), is another process using it?
sandy@sandy: ~$ sudo apt-get upgrade
E: Could not get lock /var/lib/dpkg/lock - open (11: Resource temporarily unavailable)
E: Unable to lock the administration directory (/var/lib/dpkg/), is another process using it?
sandy@sandy: ~$

vivek@nixcraft-asus: ~$ whoami
vivek
vivek@nixcraft-asus: ~$ sudo -l
[sudo] password for vivek:
root@nixcraft-asus: ~#
root@nixcraft-asus: ~# whoami
root
root@nixcraft-asus: ~# exit
Logout
```

2.

**Ensure you have an updated system.** Type in `sudo apt-get update && sudo apt-get upgrade -y`, you might get prompted for a password, type it in and press `?Enter`, no dots or asterisks will appear as you type, this is normal.

1. While technically optional, this step is always recommended before installing anything, keeping your system updated will help prevent many problems.

```
File Edit View Search Terminal Help

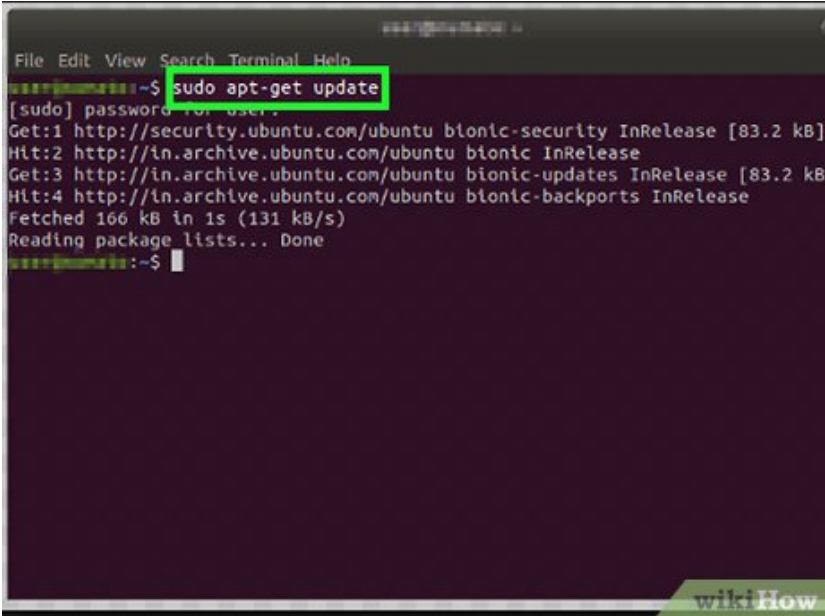
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

juggles@nixcraft-asus: ~$ sudo apt-add-repository ppa:webupd8team/java
```

3.

**Add the PPA repository to your system.** Type in `sudo add-apt-repository ppa:webupd8team/java`, and then press `?Enter`.

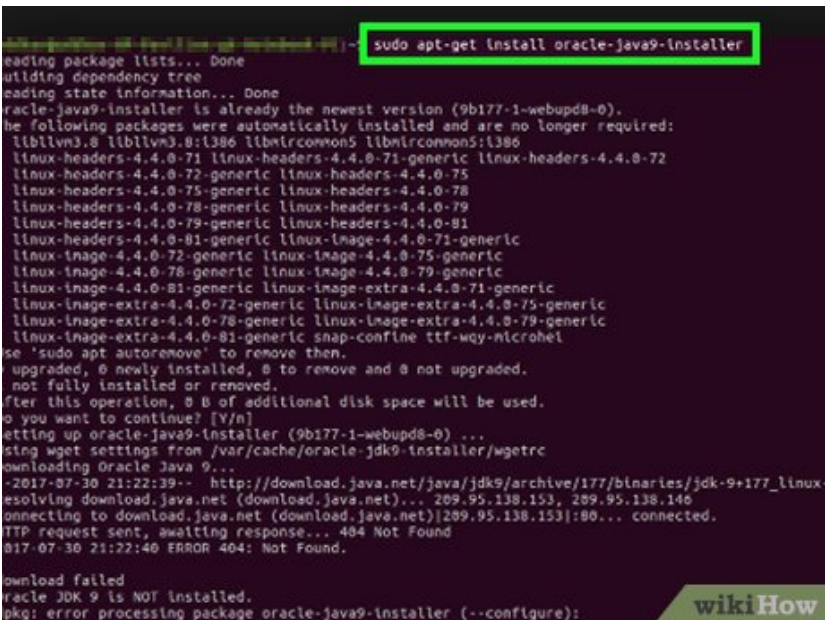
4.



```
File Edit View Search Terminal Help
www.gutenberg.org
www.gutenberg.org ~$ sudo apt-get update
[sudo] password for user:
Get:1 http://security.ubuntu.com/ubuntu bionic-security InRelease [83.2 kB]
Hit:2 http://in.archive.ubuntu.com/ubuntu bionic InRelease
Get:3 http://in.archive.ubuntu.com/ubuntu bionic-updates InRelease [83.2 kB]
Hit:4 http://in.archive.ubuntu.com/ubuntu bionic-backports InRelease
Fetched 166 kB in 1s (131 kB/s)
Reading package lists... Done
www.gutenberg.org ~$
```

**Update your package lists again.** Type in `sudo apt-get update` and wait for the lists to be refreshed.

5.



```
www.gutenberg.org ~$ sudo apt-get install oracle-java9-installer
Reading package lists... Done
Building dependency tree
Reading state information... Done
oracle-java9-installer is already the newest version (9b177-1-webupd8-0).
The following packages were automatically installed and are no longer required:
liblvm3.8 liblvm3.8:lib386 liblvm3.8:lib64 liblvm3.8:lib386
linux-headers-4.4.0-71 linux-headers-4.4.0-71-generic linux-headers-4.4.0-72
linux-headers-4.4.0-72-generic linux-headers-4.4.0-75
linux-headers-4.4.0-75-generic linux-headers-4.4.0-78
linux-headers-4.4.0-78-generic linux-headers-4.4.0-79
linux-headers-4.4.0-79-generic linux-headers-4.4.0-81
linux-headers-4.4.0-81-generic linux-image-4.4.0-71-generic
linux-image-4.4.0-72-generic linux-image-4.4.0-75-generic
linux-image-4.4.0-78-generic linux-image-4.4.0-79-generic
linux-image-4.4.0-81-generic linux-image-extra-4.4.0-71-generic
linux-image-extra-4.4.0-72-generic linux-image-extra-4.4.0-75-generic
linux-image-extra-4.4.0-78-generic linux-image-extra-4.4.0-79-generic
linux-image-extra-4.4.0-81-generic snap-confine ttf-wqy-microhei
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 8 not upgraded.
Space not fully installed or removed.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n]
Setting up oracle-java9-installer (9b177-1-webupd8-0) ...
Getting wget settings from /var/cache/oracle_jdk9_installer/wgetrc
Downloading Oracle Java 9...
--2017-07-30 21:22:39-- http://download.java.net/java/jdk9/archive/177/binary/jdk-9+177_linux
resolving download.java.net (download.java.net)... 209.95.138.153, 209.95.138.140
connecting to download.java.net (download.java.net)|209.95.138.153|80... connected.
HTTP request sent, awaiting response... 404 Not Found
2017-07-30 21:22:40 ERROR 404: Not Found.

download failed
oracle JDK 9 is NOT installed.
pkg: error processing package oracle-java9-installer (--configure):
```

**Install the package.** Type in `sudo apt-get install oracle-java9-installer -y`.

1. You might get prompted for a password, type it in and press `Enter`, no dots or asterisks will appear, this is normal.

```
Terminal
update-alternatives: using /usr/lib/jvm/java-9-oracle/bin/unpack200 (unpack200) in auto mode
update-alternatives: using /usr/lib/jvm/java-9-oracle/bin/wsgen (wsgen) in auto mode
update-alternatives: using /usr/lib/jvm/java-9-oracle/bin/wsimport (wsimport) in auto mode
update-alternatives: using /usr/lib/jvm/java-9-oracle/bin/xjc (xjc) in auto mode
update-alternatives: using /usr/lib/jvm/java-9-oracle/lib/jexec (jexec) in auto mode
update-alternatives: using /usr/lib/jvm/java-9-oracle/bin/javaws (javaws.real) in auto mode
Oracle JDK 9 installed

####Important####
To set Oracle JDK9 as default, install the "oracle-java9-set-default" package.
E.g.: sudo apt install oracle-java9-set-default.
Setting up gstreamer-x11 (0.24) ...
Setting up oracle-java9-set-default (9b152+9b152arn-1-webupd8-0) ...
root@ubuntu:~# java -version
java version "9-ea"
Java(TM) SE Runtime Environment (build 9-ea+152)
Java HotSpot(TM) 64-Bit Server VM (build 9-ea+152, mixed mode)
root@ubuntu:~#
```

6.

**Make Oracle's Java the default.** In many Ubuntu derivatives, OpenJDK is set to be the default Java to be used, if you want Oracle's Java to be used by default you need to type `sudo apt install oracle-java9-set-default`.

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