

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

```
mint@mint:~$ sudo apt update
Ign:1 cdrom://Linux Mint 21 _Vanessa_ - Release amd64 20220726 jammy InRelease
Err:2 cdrom://Linux Mint 21 _Vanessa_ - Release amd64 20220726 jammy Release
   Please use apt-cdrom to make this CD-ROM recognized by APT. apt-get update cannot be used to add new CD-ROMs
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Ign:4 http://packages.linuxmint.com vanessa InRelease
Get:5 http://packages.linuxmint.com vanessa Release [24.1 kB]
Get:6 http://packages.linuxmint.com vanessa Release.gpg [833 B]
Get:7 http://packages.linuxmint.com vanessa/main i386 Packages [16.9 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [363 kB]
Get:9 http://packages.linuxmint.com vanessa/main amd64 Packages [17.5 kB]
Get:10 http://packages.linuxmint.com vanessa/upstream i386 Packages [12.0 kB]
Get:11 http://packages.linuxmint.com vanessa/upstream amd64 Packages [44.3 kB]
Get:12 http://packages.linuxmint.com vanessa/import amd64 Packages [6275 B]
Get:13 http://packages.linuxmint.com vanessa/backport amd64 Packages [31.7 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [211 kB]
Get:15 http://packages.linuxmint.com vanessa/backport i386 Packages [5984 B]
```

```
Reading package lists... Done
E: The repository 'cdrom://Linux Mint 21 _Vanessa_ - Release amd64 20220726 jammy Release' does not have a Release file.
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
mint@mint:~$ sudo apt install apt-transport-https ca-certificates curl software-properties-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libcurl4
The following NEW packages will be installed:
  apt-transport-https software-properties-common
The following packages will be upgraded:
  ca-certificates curl libcurl4
3 upgraded, 2 newly installed, 0 to remove and 467 not upgraded.
Need to get 640 kB of archives.
After this operation, 183 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://packages.linuxmint.com vanessa/upstream amd64 software-properties-common all 2.1.9 [9528 B]
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 ca-certificates all 20211016ubuntu0.22.04.1 [144 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 apt-transport-https all 2.4.9 [1510 B]
```

```
mint@mint:~$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
OK
mint@mint:~$ sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu focal stable"
mint@mint:~$ v
v: command not found
mint@mint:~$ sudo apt update
Ign:1 cdrom://Linux Mint 21 _Vanessa_ - Release amd64 20220726 jammy InRelease
Err:2 cdrom://Linux Mint 21 _Vanessa_ - Release amd64 20220726 jammy Release
   Please use apt-cdrom to make this CD-ROM recognized by APT. apt-get update cannot be used to add new CD-ROMs
Ign:3 http://packages.linuxmint.com vanessa InRelease
Get:4 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]
Hit:5 http://packages.linuxmint.com vanessa Release
Hit:6 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:7 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:8 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:9 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:10 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [28.6 kB]
Reading package lists... Done
E: The repository 'cdrom://Linux Mint 21 _Vanessa_ - Release amd64 20220726 jammy Release' does not have a Release file.
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
W: https://download.docker.com/linux/ubuntu/dists/focal/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details
mint@mint:~$ apt-cache policy docker-ce
docker-ce:
  Installed: (none)
  Candidate: 5:23.0.6-1-ubuntu.20.04-focal
  Version table:
   5:23.0.6-1-ubuntu.20.04-focal 500
      500 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:23.0.5-1-ubuntu.20.04-focal 500
      500 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
```

```
mint@mint:~$ sudo apt install docker-ce
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  containerd.io docker-buildx-plugin docker-ce-cli docker-ce-rootless-extras docker-compose-plugin git git-man liberror-perl libsllp0 pigz slirp4netns
Suggested packages:
  aufs-tools cgroupfs-mount | cgroup-lite git-daemon-run | git-daemon-sysvinit git-doc git-email git-gui gitk gitweb git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  containerd.io docker-buildx-plugin docker-ce docker-ce-cli docker-ce-rootless-extras docker-compose-plugin git git-man liberror-perl libsllp0 pigz slirp4netns
0 upgraded, 12 newly installed, 0 to remove and 467 not upgraded.
Need to get 113 MB of archives.
After this operation, 416 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 https://download.docker.com/linux/ubuntu focal/stable amd64 containerd.io amd64 1.6.21-1 [28.3 MB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/universe amd64 pigz amd64 2.6-1 [63.6 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy/main amd64 liberror-perl all 0.17029-1 [26.5 kB]
```

```
mint@mint:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2023-05-15 23:29:15 UTC; 5s ago
 TriggeredBy: ● docker.socket
    Docs: https://docs.docker.com
   Main PID: 9033 (dockerd)
     Tasks: 9
    Memory: 28.5M
       CPU: 1.044s
    CGroup: /system.slice/docker.service
           └─9033 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

May 15 23:29:14 mint dockerd[9033]: time="2023-05-15T23:29:14.446513887Z" level=info msg="detected 127.0.0.53 nameserver,
mint@mint:~$ sudo usermod -aG docker $mint
Usage: usermod [options] LOGIN
```

```
Options:
  -b, --badnames          allow bad names
  -c, --comment COMMENT   new value of the GECOS field
  -d, --home HOME_DIR     new home directory for the user account
  -e, --expiredate EXPIRE_DATE set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE set password inactive after expiration
                           to INACTIVE
  -g, --gid GROUP          force use GROUP as new primary group
  -G, --groups GROUPS      new list of supplementary GROUPS
  -a, --append             append the user to the supplemental GROUPS
                           mentioned by the -G option without removing
                           the user from other groups
  -h, --help              display this help message and exit
  -l, --login NEW_LOGIN    new value of the login name
  -L, --lock              lock the user account
  -m, --move-home         move contents of the home directory to the
                           new location (use only with -d)
```

```
mint@mint:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
719385e32844: Pull complete
Digest: sha256:fc6cf906cbfa013e80938cdf0bb199fbdbb86d6e3e013783e5a766f50f5dbce0
Status: Downloaded newer image for hello-world:latest
```

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:

1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
(amd64)
3. The Docker daemon created a new container from that image which runs the executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it to your terminal.

```

mint@mint:~$ sudo docker search ubuntu
NAME                DESCRIPTION                STARS    OFFICIAL    AUTOMATED
ubuntu              Ubuntu is a Debian-based Linux operating sys... 15954    [OK]
websphere-liberty   WebSphere Liberty multi-architecture images ... 294      [OK]
open-liberty        Open Liberty multi-architecture images based... 59       [OK]
neurodebian         NeuroDebian provides neuroscience research s... 99       [OK]
ubuntu-debootstrap  DEPRECATED; use "ubuntu" instead                51       [OK]
ubuntu-upstart      DEPRECATED, as is Upstart (find other proces... 114      [OK]
ubuntu/nginx        Nginx, a high-performance reverse proxy & we... 91
ubuntu/cortex       Cortex provides storage for Prometheus. Long... 3
ubuntu/squid        Squid is a caching proxy for the Web. Long-t... 57
ubuntu/apache2      Apache, a secure & extensible open-source HT... 58
ubuntu/mysql        MySQL open source fast, stable, multi-thread... 48
ubuntu/kafka        Apache Kafka, a distributed event streaming ... 31
ubuntu/bind9        BIND 9 is a very flexible, full-featured DNS... 51
ubuntu/redis        Redis, an open source key-value store. Long-... 18
ubuntu/prometheus   Prometheus is a systems and service monitori... 40
ubuntu/postgres     PostgreSQL is an open source object-relatio... 27
ubuntu/zookeeper    ZooKeeper maintains configuration informatio... 5
ubuntu/grafana      Grafana, a feature rich metrics dashboard & ... 9
ubuntu/memcached    Memcached, in-memory keyvalue store for smal... 5
ubuntu/prometheus-alertmanager Alertmanager handles client alerts from Prom... 8
ubuntu/dotnet-deps  Chiselled Ubuntu for self-contained .NET & A... 8
ubuntu/dotnet-runtime Chiselled Ubuntu runtime image for .NET apps... 5
ubuntu/dotnet-aspnet Chiselled Ubuntu runtime image for ASP.NET a... 6
ubuntu/cassandra    Cassandra, an open source NoSQL distributed ... 2
ubuntu/telegraf     Telegraf collects, processes, aggregates & w... 4

```

```

mint@mint:~$ sudo docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
dbf6a9befcde: Pull complete
Digest: sha256:dfd64a3b4296d8c9b62aa3309984f8620b98d87e47492599ee20739e8eb54fbf
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest

```

```

mint@mint:~$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
hello-world   latest   9c7a54a9a43c   11 days ago    13.3kB
ubuntu        latest   3b418d7b466a   2 weeks ago    77.8MB

```

```

mint@mint:~$ sudo docker run -it ubuntu
root@a09e050a5143:/# apt update
Get:1 http://archive.ubuntu.com/ubuntu jammy InRelease [270 kB]
Get:2 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]

```

```

mint@mint:~$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES
mint@mint:~$ sudo docker ps -a
CONTAINER ID   IMAGE     COMMAND   CREATED        STATUS      PORTS     NAMES
a09e050a5143   ubuntu    "/bin/bash"   About a minute ago   Exited (0) 19 seconds ago             quirky_cori
1a82eff70d3c   hello-world "/hello"      2 minutes ago       Exited (0) 2 minutes ago             loving_yalow

```

```

mint@mint:~$ sudo docker ps -l
CONTAINER ID   IMAGE     COMMAND   CREATED        STATUS      PORTS     NAMES
a09e050a5143   ubuntu    "/bin/bash"   About a minute ago   Exited (0) 26 seconds ago             quirky_cori

```

```

mint@mint:~$ sudo docker start a09e050a5143
a09e050a5143

```

```

mint@mint:~$ sudo docker stop quirky_cori
quirky_cori

```

```

mint@mint:~$ docker commit -m "criado" -a "rionds" a09e050a5143 almatte/marta-nodejs
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Post "http://%2Fv
=latest": dial unix /var/run/docker.sock: connect: permission denied

```

```

mint@mint:~$ sudo docker commit -m "criado" -a "rionds" a09e050a5143 almatte/marta-nodejs
sha256:deb790acee8d970b7204026615684942ee7e7c9282e4c62ba25b2eb072ad2153

```

```

mint@mint:~$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
almatte/marta-nodejs latest   deb790acee8d   16 seconds ago 201MB
hello-world   latest   9c7a54a9a43c   11 days ago    13.3kB
ubuntu        latest   3b418d7b466a   2 weeks ago    77.8MB

```

```
mint@mint:~$ sudo docker login -u docker-registry-username
Password:
Error response from daemon: Get "https://registry-1.docker.io/v2/": unauthorized: incorrect username or password
mint@mint:~$ sudo docker login -u almatte
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
mint@mint:~$ sudo docker tag rionds/ubuntu-nodejs almatte/ubuntu-nodejs
Error response from daemon: No such image: rionds/ubuntu-nodejs:latest
mint@mint:~$ sudo docker tag almatte/ubuntu-nodejs almatte/ubuntu-nodejs
Error response from daemon: No such image: almatte/ubuntu-nodejs:latest
mint@mint:~$ sudo docker push almatte/marta-nodejs
Using default tag: latest
The push refers to repository [docker.io/almatte/marta-nodejs]
703488c6eaa9: Pushed
b8a36d10656a: Mounted from library/ubuntu
latest: digest: sha256:e7b744a9343652904c1faea035f7d801df16ab9d0b0ee60c4aca6b646b11f093 size: 741
mint@mint:~$
```