```
lucasxubuntu@lucasxubuntu-VirtualBox:~/Área de Trabalho$ sudo -i
[sudo] senha para lucasxubuntu:
root@lucasxubuntu-VirtualBox:~# docker run -it ubuntu
root@d75513be7036:/# 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]
Get:5 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [925 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [17.5 MB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [449 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [567 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [36.3 kB]
Get:10 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [266 kB]
Get:11 http://archive.ubuntu.com/ubuntu jammy/restricted amd64 Packages [164 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy/main amd64 Packages [1792 kB]
Get:13 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [849 kB]
Get:14 http://archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [42.2 kB]
Get:15 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1162 kB]
Get:16 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [450 kB]
Get:17 http://archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [27.0 kB]
Get:18 http://archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [49.4 kB]
Fetched 24.9 MB in 8s (3209 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
6 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@d75513be7036:/# apt install nodejs
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  ca-certificates javascript-common libbrotli1 libc-ares2 libicu70
  libjs-highlight.js libnghttp2-14 libnode72 libuv1 nodejs-doc openssl
Suggested packages:
  apache2 | lighttpd | httpd npm
The following NEW packages will be installed:
  ca-certificates javascript-common libbrotli1 libc-ares2 libicu70
  libjs-highlight.js libnghttp2-14 libnode72 libuv1 nodejs nodejs-doc openssl
0 upgraded, 12 newly installed, 0 to remove and 6 not upgraded.
```

```
Need to get 26.1 MB of archives.
After this operation, 93.0 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 openssl amd64 3.0.2-0ubuntu1.10 [1183 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 ca-certificates all 20230311ubuntu0.22.04.1 [155 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy/main amd64 libicu70 amd64 70.1-2 [10.6 MB]
Get:4 http://archive.ubuntu.com/ubuntu jammy/main amd64 libnghttp2-14 amd64 1.43.0-1build3 [76.3 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy/main amd64 libuv1 amd64 1.43.0-1 [93.1 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy/main amd64 javascript-common all 11+nmu1 [5936 B]
Get:7 http://archive.ubuntu.com/ubuntu jammy/main amd64 libbrotli1 amd64 1.0.9-2build6 [315 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libjs-highlight.js all 9.18.5+dfsg1-1 [367 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libc-ares2 amd64 1.18.1-1ubuntu0.22.04.1 [45.1 kB]
Get:10 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libnode72 amd64 12.22.9~dfsg-1ubuntu3 [10.8 MB]
Get:11 http://archive.ubuntu.com/ubuntu jammy/universe amd64 nodejs-doc all 12.22.9~dfsg-1ubuntu3 [2409 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy/universe amd64 nodejs amd64 12.22.9~dfsg-1ubuntu3 [122 kB]
Fetched 26.1 MB in 7s (4016 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package openssl.
(Reading database ... 4395 files and directories currently installed.)
Preparing to unpack .../00-openssl_3.0.2-0ubuntu1.10_amd64.deb ...
Unpacking openssl (3.0.2-0ubuntu1.10) ...
Selecting previously unselected package ca-certificates.
Preparing to unpack .../01-ca-certificates_20230311ubuntu0.22.04.1_all.deb ...
Unpacking ca-certificates (20230311ubuntu0.22.04.1) ...
Selecting previously unselected package libicu70:amd64.
Preparing to unpack .../02-libicu70_70.1-2_amd64.deb ...
Unpacking libicu70:amd64 (70.1-2) ...
Selecting previously unselected package libnghttp2-14:amd64.
Preparing to unpack .../03-libnghttp2-14_1.43.0-1build3_amd64.deb ...
Unpacking libnghttp2-14:amd64 (1.43.0-1build3) ...
Selecting previously unselected package libuv1:amd64.
Preparing to unpack .../04-libuv1_1.43.0-1_amd64.deb ...
Unpacking libuv1:amd64 (1.43.0-1) ...
Selecting previously unselected package javascript-common.
Preparing to unpack .../05-javascript-common_11+nmu1_all.deb ...
Unpacking javascript-common (11+nmu1) ...
Selecting previously unselected package libbrotli1:amd64.
Preparing to unpack .../06-libbrotli1_1.0.9-2build6_amd64.deb ...
Unpacking libbrotli1:amd64 (1.0.9-2build6) ...
Selecting previously unselected package libjs-highlight.js.
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Preparing to unpack .../07-libjs-highlight.js_9.18.5+dfsg1-1_all.deb ...
Unpacking libjs-highlight.js (9.18.5+dfsg1-1) ...
Selecting previously unselected package libc-ares2:amd64.
Preparing to unpack .../08-libc-ares2_1.18.1-1ubuntu0.22.04.1_amd64.deb ...
Unpacking libc-ares2:amd64 (1.18.1-1ubuntu0.22.04.1) ...
Selecting previously unselected package libnode72:amd64.
Preparing to unpack .../09-libnode72_12.22.9~dfsg-1ubuntu3_amd64.deb ...
Unpacking libnode72:amd64 (12.22.9~dfsg-1ubuntu3) ...
Selecting previously unselected package nodejs-doc.
Preparing to unpack .../10-nodejs-doc_12.22.9~dfsg-1ubuntu3_all.deb ...
Unpacking nodejs-doc (12.22.9~dfsg-1ubuntu3) ...
Selecting previously unselected package nodejs.
Preparing to unpack .../11-nodejs_12.22.9~dfsg-1ubuntu3_amd64.deb ...
Unpacking nodejs (12.22.9~dfsg-1ubuntu3) ...
Setting up javascript-common (11+nmu1) ...
Setting up libbrotli1:amd64 (1.0.9-2build6) ...
Setting up libnghttp2-14:amd64 (1.43.0-1build3) ...
Setting up libc-ares2:amd64 (1.18.1-1ubuntu0.22.04.1) ...
Setting up libuv1:amd64 (1.43.0-1) ...
Setting up libjs-highlight.js (9.18.5+dfsg1-1) ...
Setting up openssl (3.0.2-0ubuntu1.10) ...
Setting up libicu70:amd64 (70.1-2) ...
Setting up libnode72:amd64 (12.22.9~dfsg-1ubuntu3) ...
Setting up ca-certificates (20230311ubuntu0.22.04.1) ...
debconf: unable to initialize frontend: Dialog
debconf: (No usable dialog-like program is installed, so the dialog based fronte
nd cannot be used. at /usr/share/perl5/Debconf/FrontEnd/Dialog.pm line 78.)
debconf: falling back to frontend: Readline
debconf: unable to initialize frontend: Readline
debconf: (Can't locate Term/ReadLine.pm in @INC (you may need to install the Ter
m::ReadLine module) (@INC contains: /etc/perl /usr/local/lib/x86_64-linux-gnu/pe
rl/5.34.0 /usr/local/share/perl/5.34.0 /usr/lib/x86_64-linux-gnu/perl5/5.34 /usr
/share/perl5 /usr/lib/x86_64-linux-gnu/perl-base /usr/lib/x86_64-linux-gnu/perl/
5.34 /usr/share/perl/5.34 /usr/local/lib/site_perl) at /usr/share/perl5/Debconf/
FrontEnd/Readline.pm line 7.)
debconf: falling back to frontend: Teletype
Updating certificates in /etc/ssl/certs...
137 added, 0 removed; done.
Setting up nodejs-doc (12.22.9~dfsg-1ubuntu3) ...
Setting up nodejs (12.22.9~dfsg-1ubuntu3) ...
```

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update-alternatives: using /usr/bin/nodejs to provide /usr/bin/js (js) in auto m
ode
update-alternatives: warning: skip creation of /usr/share/man/man1/js.1.gz becau
se associated file /usr/share/man/man1/nodejs.1.gz (of link group js) doesn't ex
ist
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Processing triggers for ca-certificates (20230311ubuntu0.22.04.1) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...
done.
root@d75513be7036:/# node -v
v12.22.9
root@d75513be7036:/# exit
exit
root@lucasxubuntu-VirtualBox:~# docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED    STATUS     PORTS     NAMES
root@lucasxubuntu-VirtualBox:~# docker ps -a
CONTAINER ID   IMAGE         COMMAND       CREATED        STATUS                  PORTS     NAMES
d75513be7036   ubuntu        "/bin/bash"   3 minutes ago  Exited (0) 43 seconds ago         hardcore_spence
0683a66de7bf   hello-world   "/hello"      19 hours ago   Exited (0) 19 hours ago           eloquent_chatelet
root@lucasxubuntu-VirtualBox:~# docker ps -l
CONTAINER ID   IMAGE     COMMAND       CREATED        STATUS                PORTS     NAMES
d75513be7036   ubuntu    "/bin/bash"   4 minutes ago  Exited (0) About a minute ago   hardcore_spence
root@lucasxubuntu-VirtualBox:~# docker start d75513be7036
d75513be7036
root@lucasxubuntu-VirtualBox:~# docker ps
CONTAINER ID   IMAGE     COMMAND       CREATED        STATUS         PORTS     NAMES
d75513be7036   ubuntu    "/bin/bash"   7 minutes ago  Up 26 seconds            hardcore_spence
root@lucasxubuntu-VirtualBox:~# docker stop hardcore_spence
hardcore_spence
root@lucasxubuntu-VirtualBox:~# docker ps -a
CONTAINER ID   IMAGE         COMMAND       CREATED         STATUS                    PORTS     NAMES
d75513be7036   ubuntu        "/bin/bash"   11 minutes ago  Exited (137) About a minute ago    hardcore_spence
0683a66de7bf   hello-world   "/hello"      19 hours ago    Exited (0) 19 hours ago            eloquent_chatelet
root@lucasxubuntu-VirtualBox:~# docker rm  eloquent_chatelet
eloquent_chatelet
root@lucasxubuntu-VirtualBox:~# docker commit -m "What you did to the image" -a "Lucas" d75513be7036 Lucas/ubuntu-nodejs
invalid reference format: repository name must be lowercase
root@lucasxubuntu-VirtualBox:~# docker commit -m "What you did to the image" -a "Lucas" d75513be7036 lucas/ubuntu-nodejs
```

```
root@lucasxubuntu-VirtualBox:~# docker commit -m "What you did to the image" -a "Lucas" d75513be7036 lucas/ubuntu-nodejs
sha256:895a40f3d03c197e915740c8e789c2d33a8a4a126b99b16193b88fe6f5ffd00d
root@lucasxubuntu-VirtualBox:~# docker images
REPOSITORY          TAG       IMAGE ID       CREATED         SIZE
lucas/ubuntu-nodejs latest    895a40f3d03c   53 seconds ago  202MB
ubuntu              latest    1f6ddc1b2547   11 days ago     77.8MB
hello-world         latest    9c7a54a9a43c   4 weeks ago     13.3kB
root@lucasxubuntu-VirtualBox:~# docker login -u docker-registry-username
Password:
Error response from daemon: Get "https://registry-1.docker.io/v2/": unauthorized: incorrect username or password
root@lucasxubuntu-VirtualBox:~# docker tag lucas233dsp/ubuntu-nodejs docker-registry-username/ubuntu-nodejs
Error response from daemon: No such image: lucas233dsp/ubuntu-nodejs:latest
root@lucasxubuntu-VirtualBox:~# docker tag lucas/ubuntu-nodejs docker-registry-username/ubuntu-nodejs
root@lucasxubuntu-VirtualBox:~# docker tag lucas/ubuntu-nodejs lucas233dsp/ubuntu-nodejs
root@lucasxubuntu-VirtualBox:~# docker push docker-registry-username/docker-image-name
Using default tag: latest
The push refers to repository [docker.io/docker-registry-username/docker-image-name]
An image does not exist locally with the tag: docker-registry-username/docker-image-name
root@lucasxubuntu-VirtualBox:~# docker push lucas233dsp/ubuntu-nodejs
Using default tag: latest
The push refers to repository [docker.io/lucas233dsp/ubuntu-nodejs]
76a60a50eaba: Preparing
966e94ab6e16: Preparing
denied: requested access to the resource is denied
root@lucasxubuntu-VirtualBox:~# docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: lucas233dsp
Password:
Error response from daemon: Get "https://registry-1.docker.io/v2/": unauthorized: incorrect username or password
root@lucasxubuntu-VirtualBox:~# docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: lucas233dsp
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
root@lucasxubuntu-VirtualBox:~# docker push lucas233dsp/ubuntu-nodejs
Using default tag: latest
```

```
hello-world          latest      9c7a54a9a43c    4 weeks ago      13.3kB
root@lucasxubuntu-VirtualBox:~# docker login -u docker-registry-username
Password:
Error response from daemon: Get "https://registry-1.docker.io/v2/": unauthorized: incorrect username or password
root@lucasxubuntu-VirtualBox:~# docker tag lucas233dsp/ubuntu-nodejs docker-registry-username/ubuntu-nodejs
Error response from daemon: No such image: lucas233dsp/ubuntu-nodejs:latest
root@lucasxubuntu-VirtualBox:~# docker tag lucas/ubuntu-nodejs docker-registry-username/ubuntu-nodejs
root@lucasxubuntu-VirtualBox:~# docker tag lucas/ubuntu-nodejs lucas233dsp/ubuntu-nodejs
root@lucasxubuntu-VirtualBox:~# docker push docker-registry-username/docker-image-name
Using default tag: latest
The push refers to repository [docker.io/docker-registry-username/docker-image-name]
An image does not exist locally with the tag: docker-registry-username/docker-image-name
root@lucasxubuntu-VirtualBox:~# docker push lucas233dsp/ubuntu-nodejs
Using default tag: latest
The push refers to repository [docker.io/lucas233dsp/ubuntu-nodejs]
76a60a50eaba: Preparing
966e94ab6e16: Preparing
denied: requested access to the resource is denied
root@lucasxubuntu-VirtualBox:~# docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: lucas233dsp
Password:
Error response from daemon: Get "https://registry-1.docker.io/v2/": unauthorized: incorrect username or password
root@lucasxubuntu-VirtualBox:~# docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: lucas233dsp
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
root@lucasxubuntu-VirtualBox:~# docker push lucas233dsp/ubuntu-nodejs
Using default tag: latest
The push refers to repository [docker.io/lucas233dsp/ubuntu-nodejs]
76a60a50eaba: Pushed
966e94ab6e16: Mounted from library/ubuntu
latest: digest: sha256:b29bd17635de4b30090ba6555984a89fd09e7a64e4ebf316fc0a3cfae814046e size: 741
root@lucasxubuntu-VirtualBox:~# 
```