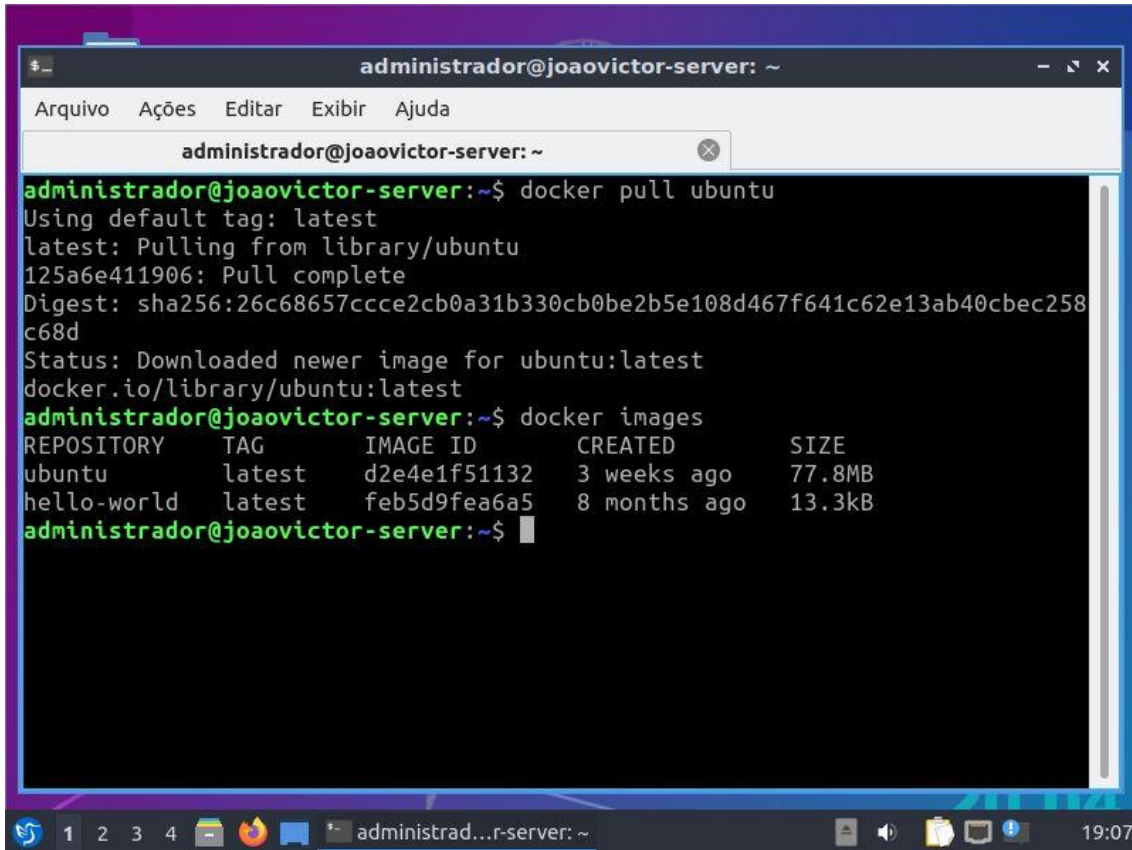


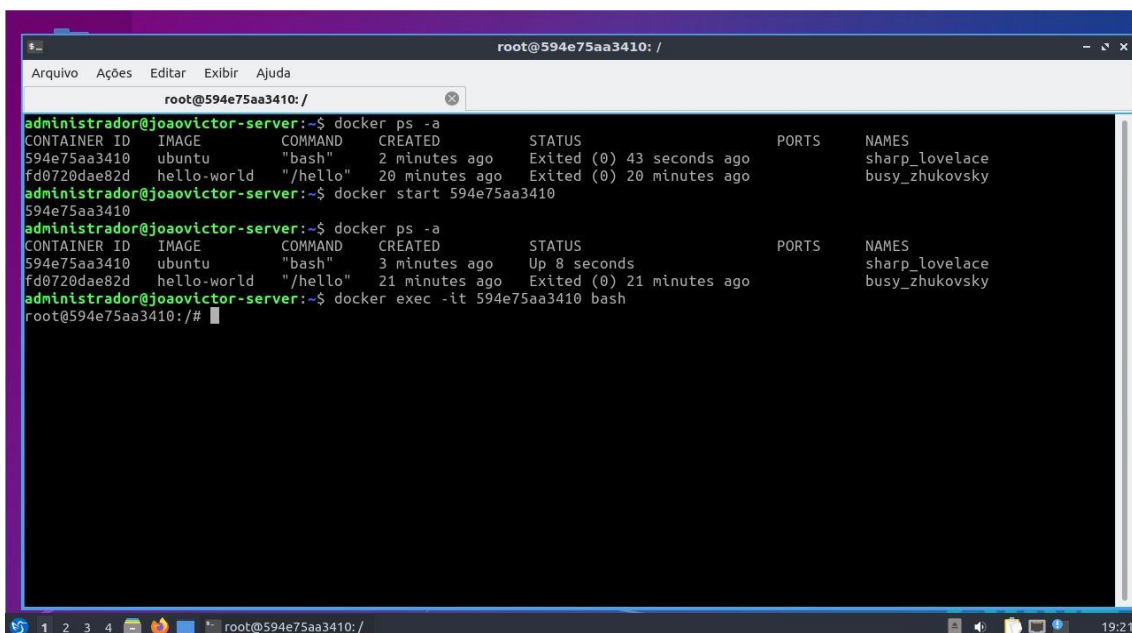
1) Criar um container a partir de uma imagem ubuntu ou alpine;

Criando container ubuntu



```
administrador@joaovictor-server: ~  
Arquivo  Ações  Editar  Exibir  Ajuda  
administrador@joaovictor-server: ~  
administrador@joaovictor-server:~$ docker pull ubuntu  
Using default tag: latest  
latest: Pulling from library/ubuntu  
125a6e411906: Pull complete  
Digest: sha256:26c68657ccce2cb0a31b330cb0be2b5e108d467f641c62e13ab40cbec258c68d  
Status: Downloaded newer image for ubuntu:latest  
docker.io/library/ubuntu:latest  
administrador@joaovictor-server:~$ docker images  
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE  
ubuntu        latest    d2e4e1f51132   3 weeks ago    77.8MB  
hello-world    latest    feb5d9fea6a5   8 months ago   13.3kB  
administrador@joaovictor-server:~$
```

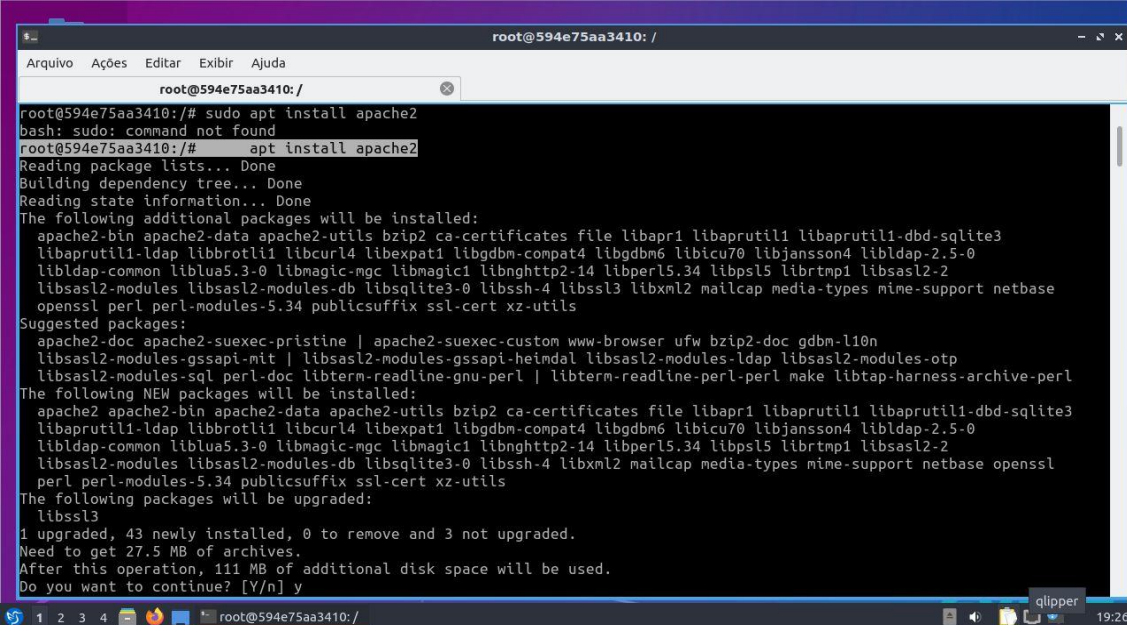
Acessando container



```
root@594e75aa3410: /  
Arquivo  Ações  Editar  Exibir  Ajuda  
root@594e75aa3410: /  
administrador@joaovictor-server:~$ docker ps -a  
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES  
594e75aa3410   ubuntu   "bash"    2 minutes ago    Exited (0) 43 seconds ago     sharp_lovelace  
fd0720dae82d   hello-world   "/hello"   20 minutes ago    Exited (0) 20 minutes ago     busy_zhukovsky  
administrador@joaovictor-server:~$ docker start 594e75aa3410  
594e75aa3410  
administrador@joaovictor-server:~$ docker ps -a  
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES  
594e75aa3410   ubuntu   "bash"    3 minutes ago    Up 8 seconds                   sharp_lovelace  
fd0720dae82d   hello-world   "/hello"   21 minutes ago    Exited (0) 21 minutes ago     busy_zhukovsky  
administrador@joaovictor-server:~$ docker exec -it 594e75aa3410 bash  
root@594e75aa3410:/#
```

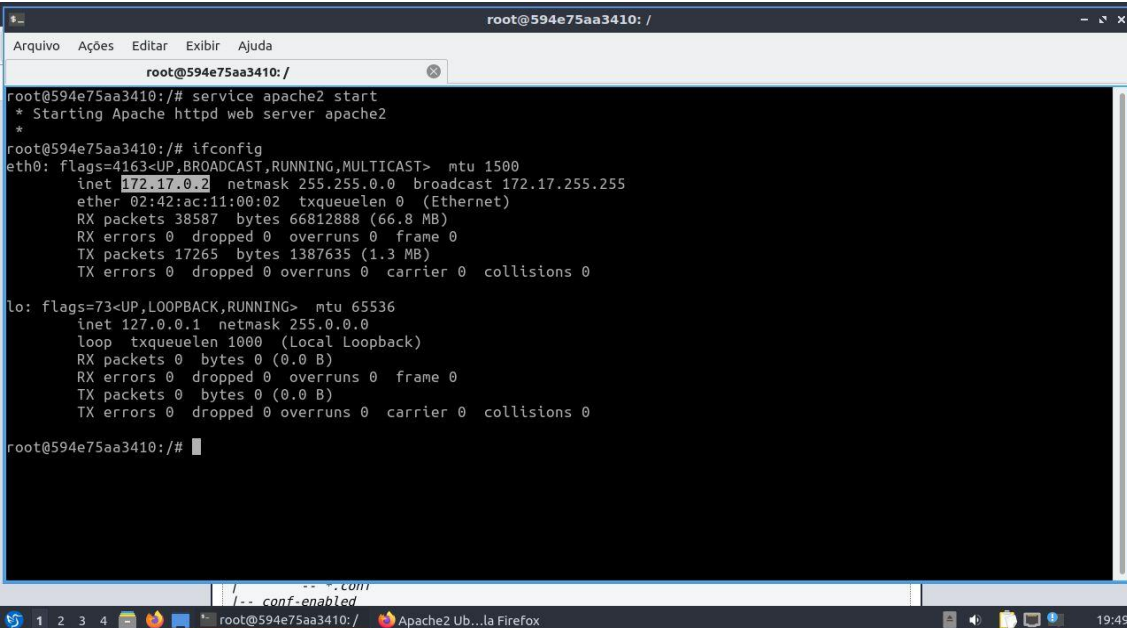
2) Entrar no container de formar a usar o shell e instalar o Apache, o PHP e o MySQL;

Instalando Apache



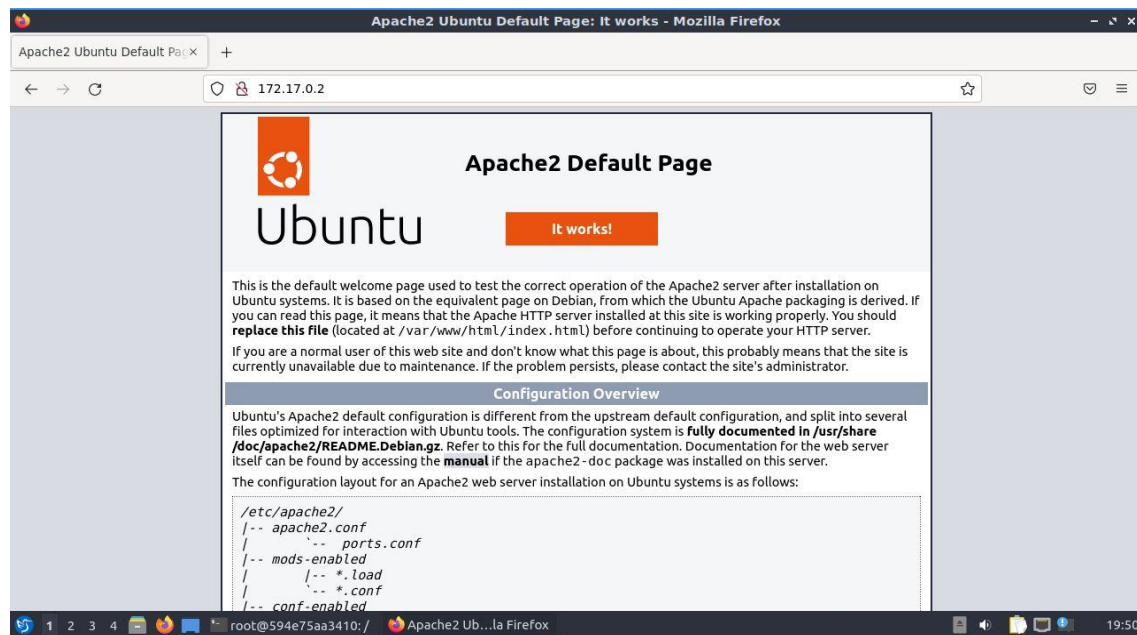
```
root@594e75aa3410: /  
root@594e75aa3410:/# sudo apt install apache2  
bash: sudo: command not found  
root@594e75aa3410:/# apt install apache2  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  apache2-bin apache2-data apache2-utils bzip2 ca-certificates file libapr1 libaprutil1 libaprutil1-dbd-sqlite3  
  libaprutil1-ldap libbrotli1 libcurl4 libexpat1 libgdbm-compat4 libgdbm6 libicu70 libjansson4 libldap-2.5-0  
  libldap-common liblua5.3-0 libmagic-mgc libmagic1 libnghttp2-14 libperl5.34 libpsl5 librtmp1 libsasl2-2  
  libsasl2-modules libsasl2-modules-db libsasl2-modules-gssapi-mit libsasl2-modules-gssapi-heimdal libsasl2-modules-ldap  
  libsasl2-modules-otp libsasl2-modules-sql perl-doc libterm-readline-gnu-perl | libterm-readline-perl-perl make libtap-harness-archive-perl  
  openssl perl-modules-5.34 publicsuffix ssl-cert xz-utils  
Suggested packages:  
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser ufw bzip2-doc gdbm-l10n  
  libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal libsasl2-modules-ldap libsasl2-modules-otp  
  libsasl2-modules-sql perl-doc libterm-readline-gnu-perl | libterm-readline-perl-perl make libtap-harness-archive-perl  
The following NEW packages will be installed:  
  apache2 apache2-bin apache2-data apache2-utils bzip2 ca-certificates file libapr1 libaprutil1 libaprutil1-dbd-sqlite3  
  libaprutil1-ldap libbrotli1 libcurl4 libexpat1 libgdbm-compat4 libgdbm6 libicu70 libjansson4 libldap-2.5-0  
  libldap-common liblua5.3-0 libmagic-mgc libmagic1 libnghttp2-14 libperl5.34 libpsl5 librtmp1 libsasl2-2  
  libsasl2-modules libsasl2-modules-db libsasl2-modules-gssapi-mit libsasl2-modules-gssapi-heimdal libsasl2-modules-ldap  
  libsasl2-modules-otp libsasl2-modules-sql perl-modules-5.34 publicsuffix ssl-cert xz-utils  
The following packages will be upgraded:  
  libssl3  
1 upgraded, 43 newly installed, 0 to remove and 3 not upgraded.  
Need to get 27.5 MB of archives.  
After this operation, 111 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y
```

Inicializando Apache

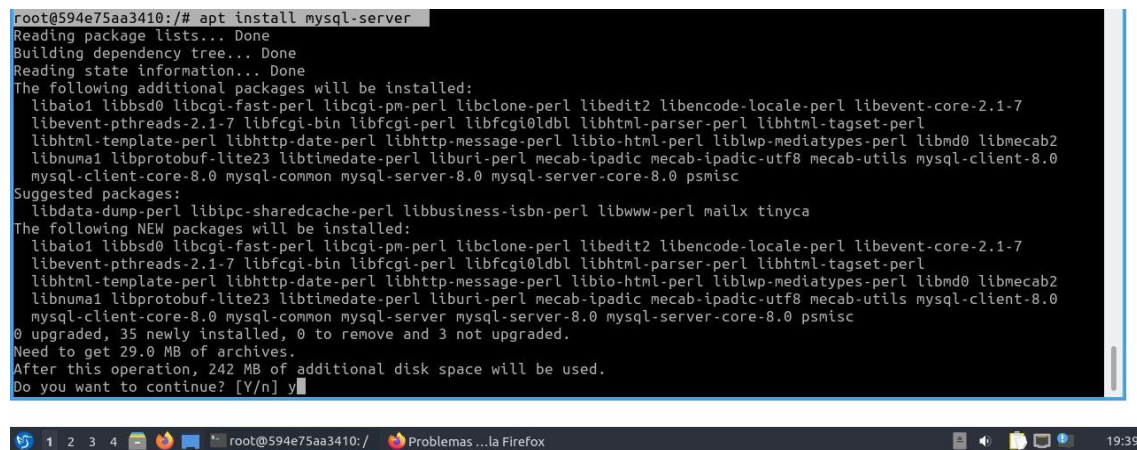


```
root@594e75aa3410: /  
root@594e75aa3410:/# service apache2 start  
* Starting Apache httpd web server apache2  
*  
root@594e75aa3410:/# ifconfig  
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 172.17.0.2 netmask 255.255.0.0 broadcast 172.17.255.255  
    ether 02:42:ac:11:00:02 txqueuelen 0 (Ethernet)  
    RX packets 38587 bytes 66812888 (66.8 MB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 17265 bytes 1387635 (1.3 MB)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
    inet 127.0.0.1 netmask 255.0.0.0  
    loop txqueuelen 1000 (Local Loopback)  
    RX packets 0 bytes 0 (0.0 B)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 0 bytes 0 (0.0 B)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
root@594e75aa3410:/#
```

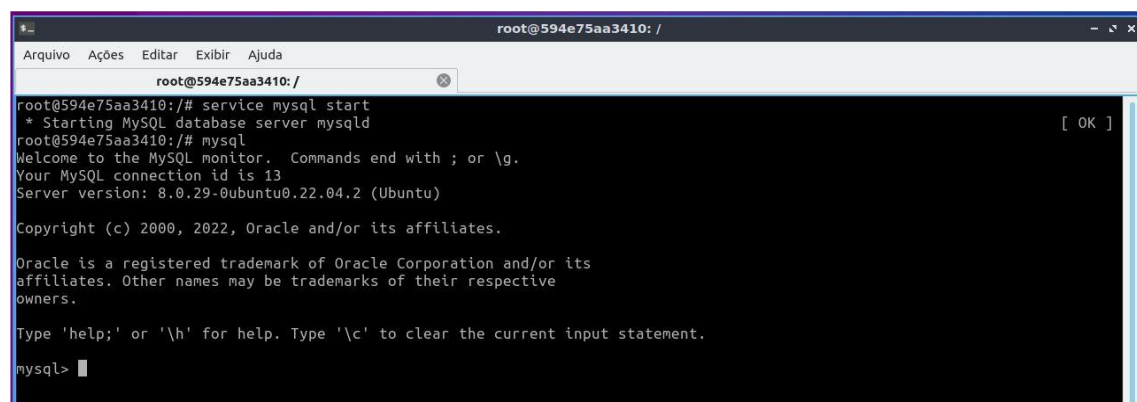
Apache funcionando



Instalando MySQL



Iniciando e acessando MySQL



Instalando PHP

```
root@594e75aa3410: /
root@594e75aa3410: /
root@594e75aa3410: /# apt install php libapache2-mod-php php-mysql
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php8.1 libargon2-1 libsodium23 php-common php8.1 php8.1-cli php8.1-common php8.1-mysql php8.1-opcache
  php8.1-readline tzdata
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php libapache2-mod-php8.1 libargon2-1 libsodium23 php php-common php-mysql php8.1 php8.1-cli php8.1-common
  php8.1-mysql php8.1-opcache php8.1-readline tzdata
0 upgraded, 14 newly installed, 0 to remove and 0 not upgraded.
Need to get 5768 kB of archives.
After this operation, 26.2 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 libargon2-1 amd64 0-20171227-0.3 [19.5 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 tzdata all 2022a-0ubuntu1 [342 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy/main amd64 php-common all 2:92ubuntu1 [12.4 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy/main amd64 php8.1-common amd64 8.1.2-1ubuntu2 [1123 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy/main amd64 php8.1-opcache amd64 8.1.2-1ubuntu2 [365 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy/main amd64 php8.1-readline amd64 8.1.2-1ubuntu2 [13.5 kB]
Get:7 http://archive.ubuntu.com/ubuntu jammy/main amd64 libsodium23 amd64 1.0.18-1build2 [164 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy/main amd64 php8.1-cli amd64 8.1.2-1ubuntu2 [1825 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy/main amd64 libapache2-mod-php8.1 amd64 8.1.2-1ubuntu2 [1757 kB]
Get:10 http://archive.ubuntu.com/ubuntu jammy/main amd64 libapache2-mod-php all 2:8.1+92ubuntu1 [2898 B]
Get:11 http://archive.ubuntu.com/ubuntu jammy/main amd64 php8.1 all 8.1.2-1ubuntu2 [9162 B]
Get:12 http://archive.ubuntu.com/ubuntu jammy/main amd64 php all 2:8.1+92ubuntu1 [2756 B]
```

Versão do PHP

```
root@594e75aa3410: /
root@594e75aa3410: /
root@594e75aa3410: /# php -v
PHP 8.1.2 (cli) (built: Apr 7 2022 17:46:26) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
with Zend OPcache v8.1.2, Copyright (c), by Zend Technologies
root@594e75aa3410: /#
```

3) Instalar o PHPMYAdmin;

Instalando PHPMYAdmin;

```
root@594e75aa3410: /
root@594e75aa3410: /
root@594e75aa3410: /# apt-get install phpmyadmin php-mbstring
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  dbconfig-common dbconfig-mysql fontconfig-config fonts-dejavu-core icc-profiles-free javascript-common libdeflate0
  libfontconfig1 libfreetype6 libgd3 libjpeg-turbo8 libjpeg8 libjs-bootstrap4 libjs-codemirror libjs-jquery
  libjs-jquery-mousewheel libjs-jquery-timepicker libjs-jquery-ui libjs-popper.js libjs-sizzle libjs-sphinxdoc
  libjs-underscore libonig5 libpng16-16 libtiff5 libwebp7 libx11-6 libx11-data libxau6 libxcb1 libxdmcp6 libxpm4 libxslt1.1
  libzip4 node-jquery php-bz2 php-curl php-gd php-google-recaptcha php-json php-mariadb-mysql-kbs php-nikic-fast-route
  php-phpmyadmin-motranslator php-phpmyadmin-shapefile php-phpmyadmin-sql-parser php-phpseclib php-psr-cache
  php-psr-container php-psr-log php-symfony-cache php-symfony-cache-contracts php-symfony-config
  php-symfony-dependency-injection php-symfony-deprecation-contracts php-symfony-expression-language php-symfony-filesystem
  php-symfony-polyfill-php80 php-symfony-polyfill-php81 php-symfony-service-contracts php-symfony-var-exporter php-tcpdf
  php-twig php-twig-i18n-extension php-xml php-zip php8.1-bz2 php8.1-curl php8.1-gd php8.1-mbstring php8.1-xml php8.1-zip
Suggested packages:
  libgd-tools libjs-requirejs libjs-jquery-ui-docs php-dbase php-libsodium php-mcrypt php-gmp php-symfony-yaml
  php-symfony-finder php-symfony-proxy-manager-bridge php-imagick php-twig-doc php-recode www-browser php-gd2
  php-pragmarx-google2fa-qrcode php-sanyoul-u2f-php-server
Recommended packages:
  php-mcrypt
The following NEW packages will be installed:
  dbconfig-common dbconfig-mysql fontconfig-config fonts-dejavu-core icc-profiles-free javascript-common libdeflate0
  libfontconfig1 libfreetype6 libgd3 libjpeg-turbo8 libjpeg8 libjs-bootstrap4 libjs-codemirror libjs-jquery
  libjs-jquery-mousewheel libjs-jquery-timepicker libjs-jquery-ui libjs-popper.js libjs-sizzle libjs-sphinxdoc
  libjs-underscore libonig5 libpng16-16 libtiff5 libwebp7 libx11-6 libx11-data libxau6 libxcb1 libxdmcp6 libxpm4 libxslt1.1
  libzip4 node-jquery php-bz2 php-curl php-gd php-google-recaptcha php-json php-mariadb-mysql-kbs php-mbstring
  php-nikic-fast-route php-phpmyadmin-motranslator php-phpmyadmin-shapefile php-phpmyadmin-sql-parser php-phpseclib
```


Reiniciando Apache para iniciar PHPMyAdmin

```
mysql> GRANT ALL PRIVILEGES ON *.* TO 'phpmyadmin'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

mysql> EXIT
Bye
root@594e75aa3410:/# service apache2 restart
* Restarting Apache httpd web server apache2
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress this message

root@594e75aa3410:/#
```

1 2 3 4 root@594e75aa3410:/ phpMyAdmin...a Firefox 20:19

PHPMyAdmin funcionando

← → ↻ 172.17.0.2/phpmyadmin/index.php?route=/


Bemvindo ao phpMyAdmin

Língua - Language
Português - Portuguese

Entrada

Utilizador :

Palavra-passe:

Executar

1 2 3 4 administrad...r-server: ~ phpMyAdmin...a Firefox Downloads 20:50

3) Commitar o container com o apelido ubuntu/phpmyadmin;

```
administrador@joaovictor-server:~$ docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
594e75aa3410   ubuntu    "bash"                  2 hours ago   Up 2 hours           sharp_lovelace
fd0720dae82d   hello-world "/hello"                2 hours ago   Exited (0) 2 hours ago   busy_zhukovsky

administrador@joaovictor-server:~$ docker exec -it 594e75aa3410 bash
root@594e75aa3410:/# exit
exit
administrador@joaovictor-server:~$ sudo docker ps -q
[sudo] senha para administrador:
594e75aa3410
administrador@joaovictor-server:~$ sudo docker commit 594e75aa3410 ubuntu/phpmyadmin
sha256:2bbb4ad4886df3648214b545ff871ecb0049e1e2a68334cc01c1b480e0c50b58
administrador@joaovictor-server:~$ sudo docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
ubuntu/phpmyadmin    latest     2bbb4ad4886d  14 seconds ago 900MB
ubuntu               latest     d2e4e1f51132  3 weeks ago   77.8MB
hello-world          latest     feb5d9fea6a5  8 months ago  13.3kB
administrador@joaovictor-server:~$
```