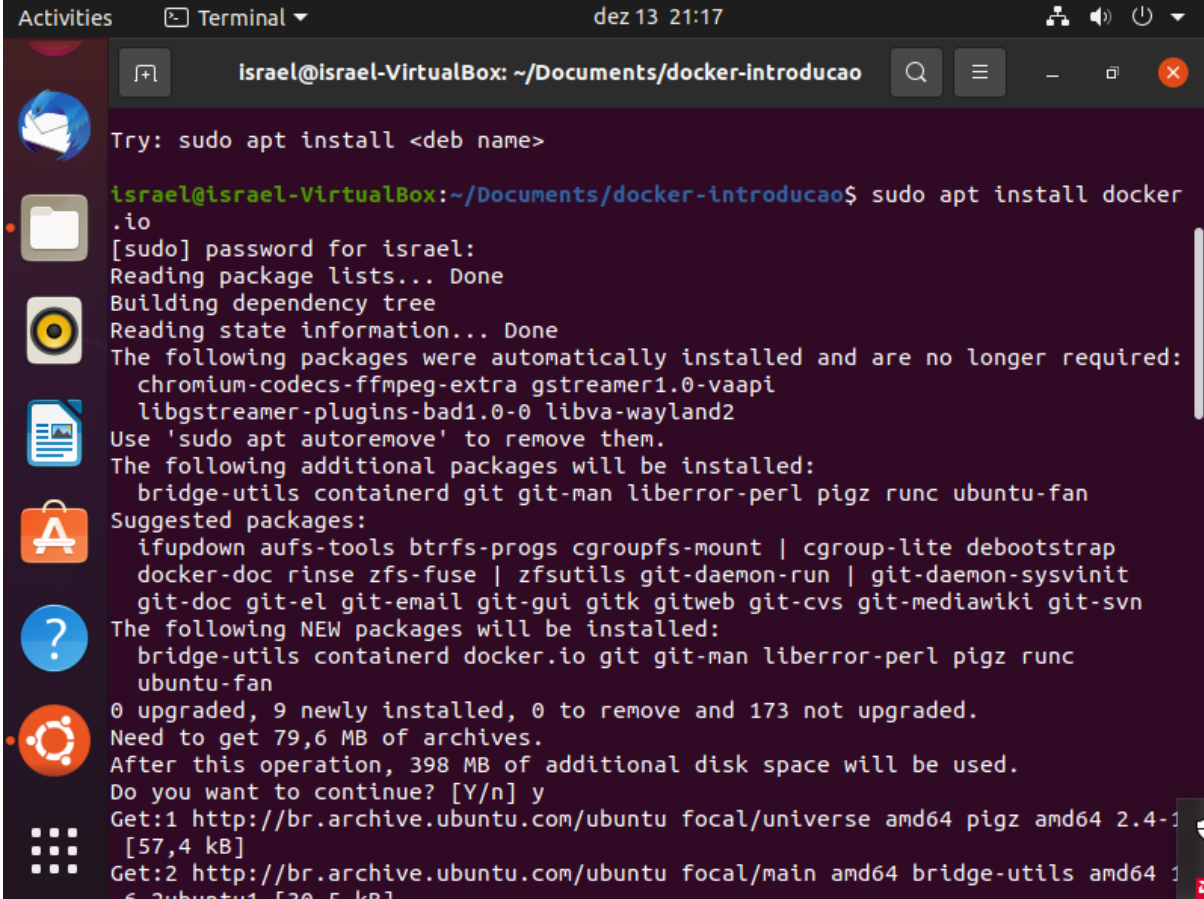


# Atividade 10 - Docker

Israel Leite Filho

## Docker - Instalação



A terminal window titled 'israel@israel-VirtualBox: ~/Documents/docker-introducao' showing the installation of Docker. The user enters the command 'sudo apt install docker.io'. The terminal output shows the process of reading package lists, building a dependency tree, and installing Docker along with several additional packages like bridge-utils, containerd, and git. It also lists suggested packages and shows the disk space requirements.

```
israel@israel-VirtualBox: ~/Documents/docker-introducao$ sudo apt install docker.io
[sudo] password for israel:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi
  libgstreamer-plugins-bad1.0-0 libva-wayland2
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  bridge-utils containerd git git-man liberror-perl pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools btrfs-progs cgroupfs-mount | cgroup-lite debootstrap
  docker-doc rinse zfs-fuse | zfsutils git-daemon-run | git-daemon-sysvinit
  git-doc git-el git-email git-gui gitk gitweb git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  bridge-utils containerd docker.io git git-man liberror-perl pigz runc
  ubuntu-fan
0 upgraded, 9 newly installed, 0 to remove and 173 not upgraded.
Need to get 79,6 MB of archives.
After this operation, 398 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://br.archive.ubuntu.com/ubuntu focal/universe amd64 pigz amd64 2.4-1
[57,4 kB]
Get:2 http://br.archive.ubuntu.com/ubuntu focal/main amd64 bridge-utils amd64 1
6.2ubuntu1 [20,5 kB]
```

## Criação da Imagem Dockerfile

```
Activities Terminal dez 13 22:10
israel@israel-VirtualBox: ~/Documents/docker-introducao

irectory
israel@israel-VirtualBox:~/Documents/docker-introducao$ ^C
israel@israel-VirtualBox:~/Documents/docker-introducao$ docker build -t mysql-i
mage -f api/db/Dockerfile .
Sending build context to Docker daemon 3.072kB
Step 1/2 : FROM mysql
latest: Pulling from library/mysql
ffbb094f4f9e: Pull complete
df186527fc46: Pull complete
fa362a6aa7bd: Pull complete
5af7cb1a200e: Pull complete
949da226cc6d: Pull complete
bce007079ee9: Pull complete
eab9f076e5a3: Pull complete
8a57a7529e8d: Pull complete
b1ccc6ed6fc7: Pull complete
b4af75e64169: Pull complete
3aed6a9cd681: Pull complete
23390142f76f: Pull complete
Digest: sha256:ff9a288d1ecf4397967989b5d1ec269f7d9042a46fc8bc2c3ae35458c1a26727
Status: Downloaded newer image for mysql:latest
--> bb6f571db497
Step 2/2 : ENV MYSQL_ROOT_PASSWORD 123456
--> Running in 277153b642c0
Removing intermediate container 277153b642c0
--> f169b5248875
Successfully built f169b5248875
Successfully tagged mysql-image:latest
israel@israel-VirtualBox:~/Documents/docker-introducao$
```

## Imagem criada

```
Activities Terminal dez 13 22:11
israel@israel-VirtualBox: ~/Documents/docker-introducao

israel@israel-VirtualBox:~/Documents/docker-introducao$ docker image
REPOSITORY TAG IMAGE ID CREATED SIZE
mysql-image latest f169b5248875 About a minute ago 516MB
mysql latest bb6f571db497 11 days ago 516MB
israel@israel-VirtualBox:~/Documents/docker-introducao$
```

## Rodando docker com a imagem

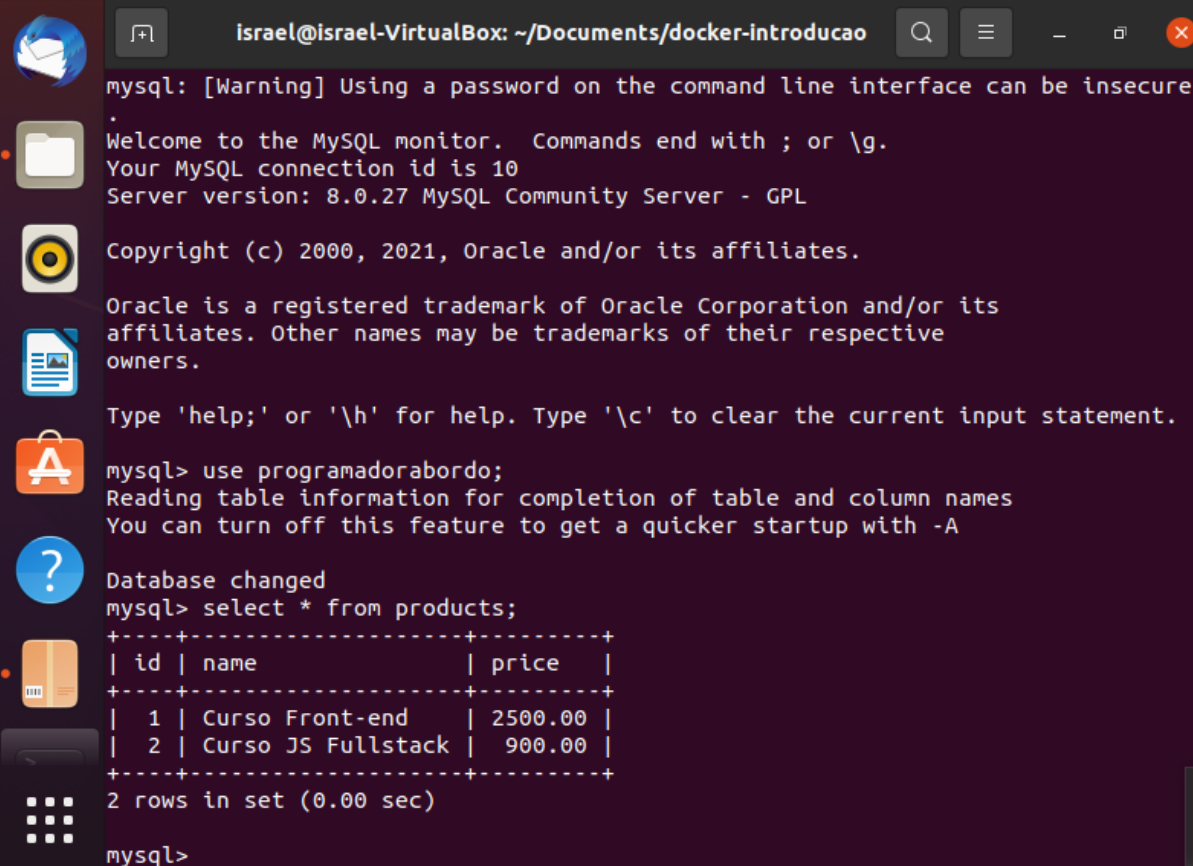
```
s Terminal dez 13 22:12
israel@israel-VirtualBox: ~/Documents/docker-introducao
israel@israel-VirtualBox:~/Documents/docker-introducao$ docker run -d --rm
me mysql-container mysql-image
9e756c18a895bb8fa6f7b433cd448c11e1c9e7f8977653f29bfad508f1a89636
israel@israel-VirtualBox:~/Documents/docker-introducao$
```

```
israel@israel-VirtualBox:~/Documents/docker-introducao$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS
PORTS
9e756c18a895   mysql-image    "docker-entrypoint.s..." 17 seconds ago Up 1
conds 3306/tcp, 33060/tcp mysql-container
israel@israel-VirtualBox:~/Documents/docker-introducao$
```

```
israel@israel-VirtualBox:~/Documents/docker-introducao$ docker exec -i my
ntainer mysql -uroot -p123456 < api/db/script.sql
mysql: [Warning] Using a password on the command line interface can be in
.
israel@israel-VirtualBox:~/Documents/docker-introducao$
```

```
israel@israel-VirtualBox:~/Documents/docker-introducao$ docker exec -it mys
ontainer /bin/bash
root@9e756c18a895:/#
```

## Banco de Dados



The screenshot shows a terminal window titled "israel@israel-VirtualBox: ~/Documents/docker-introducao". The terminal displays the MySQL command-line interface. It starts with a warning about using passwords on the command line, followed by a welcome message and server information (MySQL 8.0.27). The user enters the command "use programadorabordo;" to switch to a database. Then, they enter "select \* from products;" to retrieve data from a table named 'products'. The output is a table with two columns: 'id' and 'name', and a 'price' column. Two rows are shown: one for 'Curso Front-end' at 2500.00 and another for 'Curso JS Fullstack' at 900.00. The terminal also shows the command prompt "mysql>" at the end.

```
mysql: [Warning] Using a password on the command line interface can be insecure
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.27 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

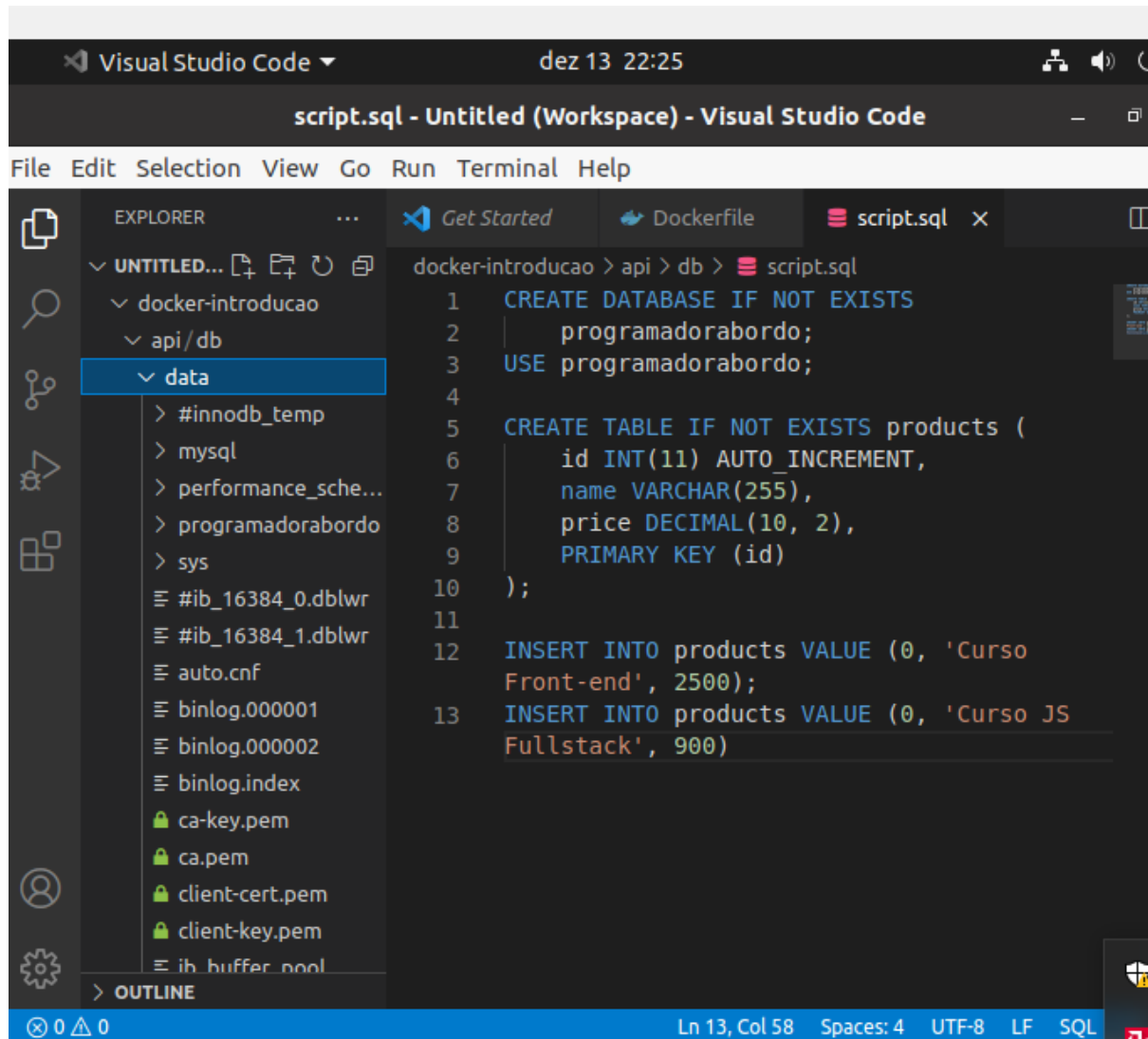
mysql> use programadorabordo;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select * from products;
+----+-----+-----+
| id | name                | price |
+----+-----+-----+
|  1 | Curso Front-end     | 2500.00 |
|  2 | Curso JS Fullstack  |  900.00 |
+----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

```
exit
israel@israel-VirtualBox:~/Documents/docker-introducao$ docker stop mysql-container
mysql-container
israel@israel-VirtualBox:~/Documents/docker-introducao$ docker run -d -v $(pwd)/api/db/data:/var/lib/mysql --rm --name mysql-container mysql-image
0ad389385f074cfdbbe070e43f12463516bd722b6cbd533f7a3886b796e63147
israel@israel-VirtualBox:~/Documents/docker-introducao$
```

## Script em Sql



```
Visual Studio Code  dez 13 22:25
script.sql - Untitled (Workspace) - Visual Studio Code
File Edit Selection View Go Run Terminal Help

EXPLORER
  UNTITLED...
  docker-introducao
    api/db
      data
        #innodb_temp
        mysql
        performance_sche...
        programadorabordo
        sys
        #ib_16384_0.dblwr
        #ib_16384_1.dblwr
        auto.cnf
        binlog.000001
        binlog.000002
        binlog.index
        ca-key.pem
        ca.pem
        client-cert.pem
        client-key.pem
        ib_buffer_pool
  OUTLINE

Get Started Dockerfile script.sql
docker-introducao > api > db > script.sql
1 CREATE DATABASE IF NOT EXISTS
2   programadorabordo;
3 USE programadorabordo;
4
5 CREATE TABLE IF NOT EXISTS products (
6   id INT(11) AUTO_INCREMENT,
7   name VARCHAR(255),
8   price DECIMAL(10, 2),
9   PRIMARY KEY (id)
10 );
11
12 INSERT INTO products VALUE (0, 'Curso
13   Front-end', 2500);
14 INSERT INTO products VALUE (0, 'Curso JS
15   Fullstack', 900)
```

```
package name: (api) docker-intro-api
version: (1.0.0)
description: Programador a bordo
entry point: (index.js)
test command: test
git repository:
keywords: Docker
author: Israel Leite
license: (ISC)
About to write to /home/israel/Documents/docker-introducao/api/package.json
```

```
{
  "name": "docker-intro-api",
  "version": "1.0.0",
  "description": "Programador a bordo",
  "main": "index.js",
  "scripts": {
    "test": "test"
  },
  "keywords": [
    "Docker"
  ],
  "author": "Israel Leite",
  "license": "ISC"
}
```

Is this OK? (yes) yes

```
israel@israel-VirtualBox:~/Documents/docker-introducao/api$
```

```
Activities Terminal dez 13 23:05
root@israel-VirtualBox: /home/israel/Documents/docker-i...

Try: sudo apt install <deb name>

israel@israel-VirtualBox:~/Documents/docker-introducao$ sudo -s
[sudo] password for israel:
root@israel-VirtualBox:/home/israel/Documents/docker-introducao# doc
t node-image -f api/Dockerfile .
Sending build context to Docker daemon 211.7MB
Step 1/3 : FROM node:10-slim
10-slim: Pulling from library/node
62deabe7a6db: Pull complete
f698164f6049: Pull complete
bc29352cb629: Pull complete
85e84b4c858f: Pull complete
ac72e4359589: Pull complete
Digest: sha256:88932859e3d022d79161b99628c4c2c50e836437455e2d1b1a008
Status: Downloaded newer image for node:10-slim
---> 6fbcbbb5c603
Step 2/3 : WORKDIR /home/bide/app
---> Running in 5f2fe370e0db
Removing intermediate container 5f2fe370e0db
---> de06932f2f47
Step 3/3 : CMD npm start
---> Running in c3b3291a4233
Removing intermediate container c3b3291a4233
---> 2e0cc2d8069e
Successfully built 2e0cc2d8069e
Successfully tagged node-image:latest
root@israel-VirtualBox:/home/israel/Documents/docker-introducao#

Successfully built 2e0cc2d8069e
Successfully tagged node-image:latest
root@israel-VirtualBox:/home/israel/Documents/docker-introducao# docker image l
s
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
node-image    latest    2e0cc2d8069e   10 minutes ago 134MB
mysql-image    latest    f169b5248875   About an hour ago 516MB
mysql          latest    bbf6571db497   11 days ago    516MB
node           10-slim   6fbcbbb5c603   8 months ago   134MB
root@israel-VirtualBox:/home/israel/Documents/docker-introducao# docker run -d
-v $(pwd)/api:/home/node/app -p 9001:9001 --rm --name node-container node-image
6fd559fe9972e45538896d588a794551ee2a65a6597726cbbf631fc9c489aa57
root@israel-VirtualBox:/home/israel/Documents/docker-introducao#
```



```
▼ [
  ▼ {
    "name": "Curso Front-end especialista",
    "price": 2500
  },
  ▼ {
    "name": "Curso JS Fullstack",
    "price": 900
  }
]
```

```
root@israel-VirtualBox:/home/israel/Documents/docker-introducao# docker build
t php-image -f website/Dockerfile .
Sending build context to Docker daemon 211.7MB
Step 1/2 : FROM php:7.2-apache
7.2-apache: Pulling from library/php
6ec7b7d162b2: Pull complete
db606474d60c: Pull complete
afb30f0cd8e0: Pull complete
3bb2e8051594: Pull complete
4c761b44e2cc: Pull complete
c2199db96575: Pull complete
1b9a9381eea8: Pull complete
fd07bbc59d34: Pull complete
72b73ab27698: Pull complete
983308f4f0d6: Pull complete
6c13f026e6da: Pull complete
e5e6cd163689: Pull complete
5c5516e56582: Pull complete
154729f6ba86: Pull complete
Digest: sha256:4dc0f0115acf8c2f0df69295ae822e49f5ad5fe849725847f15aa0e5802b5
Status: Downloaded newer image for php:7.2-apache
---> c61d277263e1
Step 2/2 : WORKDIR /var/www/html
---> Running in 9fe5166f773f
Removing intermediate container 9fe5166f773f
---> dc1ab26e9467
Successfully built dc1ab26e9467
Successfully tagged php-image:latest
root@israel-VirtualBox:/home/israel/Documents/docker-introducao# docker run
```



## Pasta Final

