docker Aufgabenstellung

-) Starte in Docker einen (neuen) Ubuntu-Container

-) Aktualisiere den Paketmanager apt und installiere dann das Programm tree

-) Wechsel anschließend in das Stammverzeichnis (cd /)

-) Führe dann den Befehl tree aus — was passiert, welchen erfüllt das Programm tree?

-) Ermitteln Sie mithilfe der tree-Befehls die ungefähre Anzahl der Files des Betriebssystems

Lösung

Container starten

```
[07:49] ☒ fish
■ C:\Windows\system32
❯ docker run -d --name ubuntu -it ubuntu
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
29202e855b20: Pull complete
Digest: sha256:e6173d4dc55e76b87c4af8db8821b1feae4146dd47341e4d431118c7dd060a74
Status: Downloaded newer image for ubuntu:latest
bccae44a489ed46abec89008ccf73d0cbbfb06eae41e2125e19c5feb1136b875
[07:49] ☒ fish
■ C:\Windows\system32
❯ |
```

bash

```bash
1   docker run -d --name ubuntu -it
    ubuntu
```

Aktualisieren

```
[07:49] ☒ fish
■ C:\Windows\system32
❯ docker exec -it ubuntu bash
root@bccae44a489e:/# apt update
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:2 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1685 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy InRelease [270 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [44.6 kB]
Get:5 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [1061 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1398 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [17.5 MB]
Get:10 http://archive.ubuntu.com/ubuntu jammy/main amd64 Packages [1792 kB]
Get:11 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [266 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy/restricted amd64 Packages [164 kB]
Get:13 http://archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [50.4 kB]
Get:14 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1328 kB]
Get:15 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [1722 kB]
Get:16 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1677 kB]
Get:17 http://archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [50.4 kB]
Get:18 http://archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [28.1 kB]
Fetched 29.3 MB in 29s (1003 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
9 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@bccae44a489e:/# |
```

```bash
docker exec -it ubuntu bash
apt update
```

```
root@bccae44a489e:/# apt upgrade -y
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
Calculating upgrade ... Done
The following packages will be upgraded:
  base-files libgnutls30 libpam-modules libpam-modules-bin libpam-runtime libpam0g libssl3 libsystemd0 libudev1
9 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 3749 kB of archives.
After this operation, 3072 B of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 base-files amd64 12ubuntu4.5 [62.7 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpam0g amd64 1.4.0-11ubuntu2.4 [60.2 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpam-modules-bin amd64 1.4.0-11ubuntu2.4 [37.6 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpam-modules amd64 1.4.0-11ubuntu2.4 [280 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libsystemd0 amd64 249.11-0ubuntu3.12 [319 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpam-runtime all 1.4.0-11ubuntu2.4 [40.3 kB]
Get:7 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libssl3 amd64 3.0.2-0ubuntu1.13 [1902 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libudev1 amd64 249.11-0ubuntu3.12 [78.2 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgnutls30 amd64 3.7.3-4ubuntu1.4 [969 kB]
Fetched 3749 kB in 9s (433 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
(Reading database ... 4393 files and directories currently installed.)
```

```
apt upgrade -y
```

tree installieren

```
root@bccae44a489e:/# apt install tree
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
The following NEW packages will be installed:
  tree
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 47.9 kB of archives.
After this operation, 116 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/universe amd64 tree amd64 2.0.2-1 [47.9 kB]
Fetched 47.9 kB in 0s (103 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package tree.
(Reading database ... 4393 files and directories currently installed.)
Preparing to unpack .../tree_2.0.2-1_amd64.deb ...
Unpacking tree (2.0.2-1) ...
Setting up tree (2.0.2-1) ...
root@bccae44a489e:/# 
```

```
apt install tree
```

ins Stammverzeichnis wechseln

```
root@bccae44a489e:/# cd /
root@bccae44a489e:/# |
```

```
cd /
```

tree ausführen

was macht tree

tree gibt eine graphische darstellung
der struktur des Filesystems aus

Anzahl der Files im Betriebssystem

```
3776 directories, 17524 files
root@bccae44a489e:/# |
```

```
tree
```