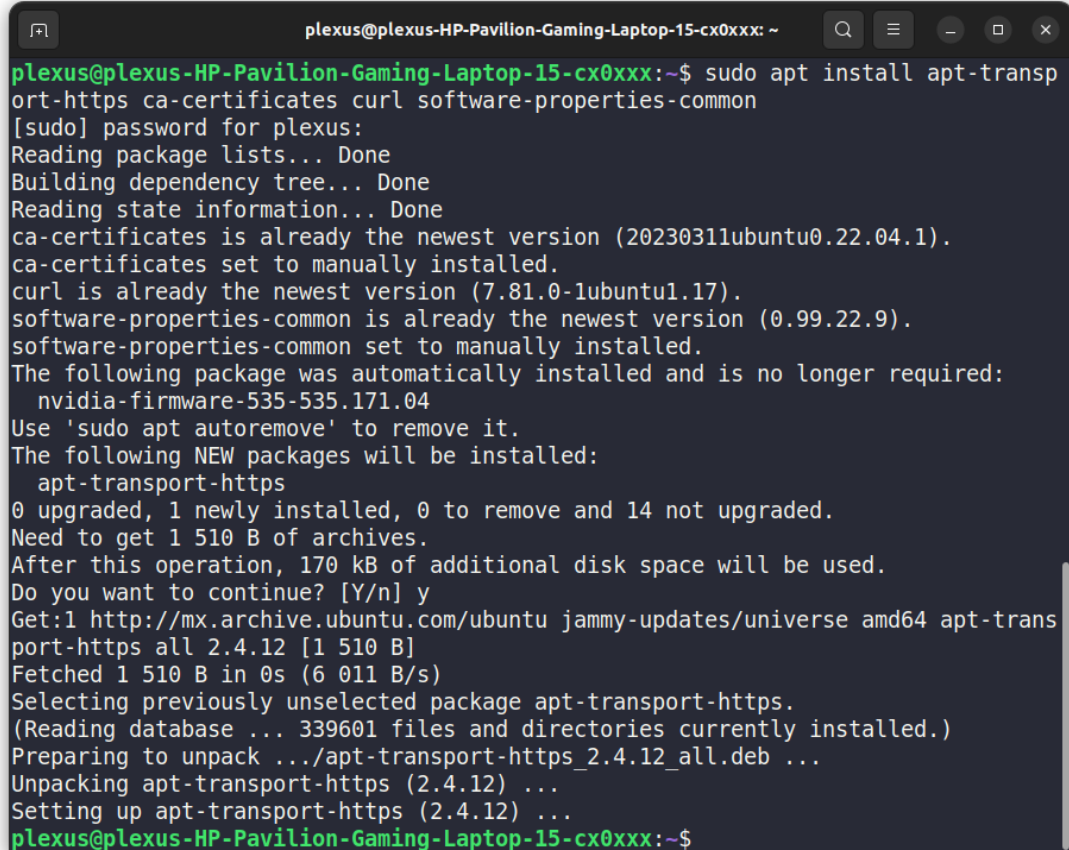


Integrante

Castillo Hernández Eduardo 420003557

Bitácora

- Sistema operativo, distribución y versión: Linux Ubuntu 22.04.4 LTS
- Versión de la instalación:
 - Docker version 27.1.2, build d01f264
 - PostgreSQL psql (16.4 (Debian 16.4-1.pgdg120+1))
 - DBeaver version 24.1.5.202408181605
- Tiempo requerido: 1 hora
- Proceso de instalación:
 1. Instalación de paquetes de requisitos previos, (solo se requirió 1).



```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo apt install apt-transport-https ca-certificates curl software-properties-common  
[sudo] password for plexus:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
ca-certificates is already the newest version (20230311ubuntu0.22.04.1).  
ca-certificates set to manually installed.  
curl is already the newest version (7.81.0-1ubuntu1.17).  
software-properties-common is already the newest version (0.99.22.9).  
software-properties-common set to manually installed.  
The following package was automatically installed and is no longer required:  
  nvidia-firmware-535-535.171.04  
Use 'sudo apt autoremove' to remove it.  
The following NEW packages will be installed:  
  apt-transport-https  
0 upgraded, 1 newly installed, 0 to remove and 14 not upgraded.  
Need to get 1 510 B of archives.  
After this operation, 170 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://mx.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 apt-transport-https all 2.4.12 [1 510 B]  
Fetched 1 510 B in 0s (6 011 B/s)  
Selecting previously unselected package apt-transport-https.  
(Reading database ... 339601 files and directories currently installed.)  
Preparing to unpack ../apt-transport-https_2.4.12_all.deb ...  
Unpacking apt-transport-https (2.4.12) ...  
Setting up apt-transport-https (2.4.12) ...  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$
```

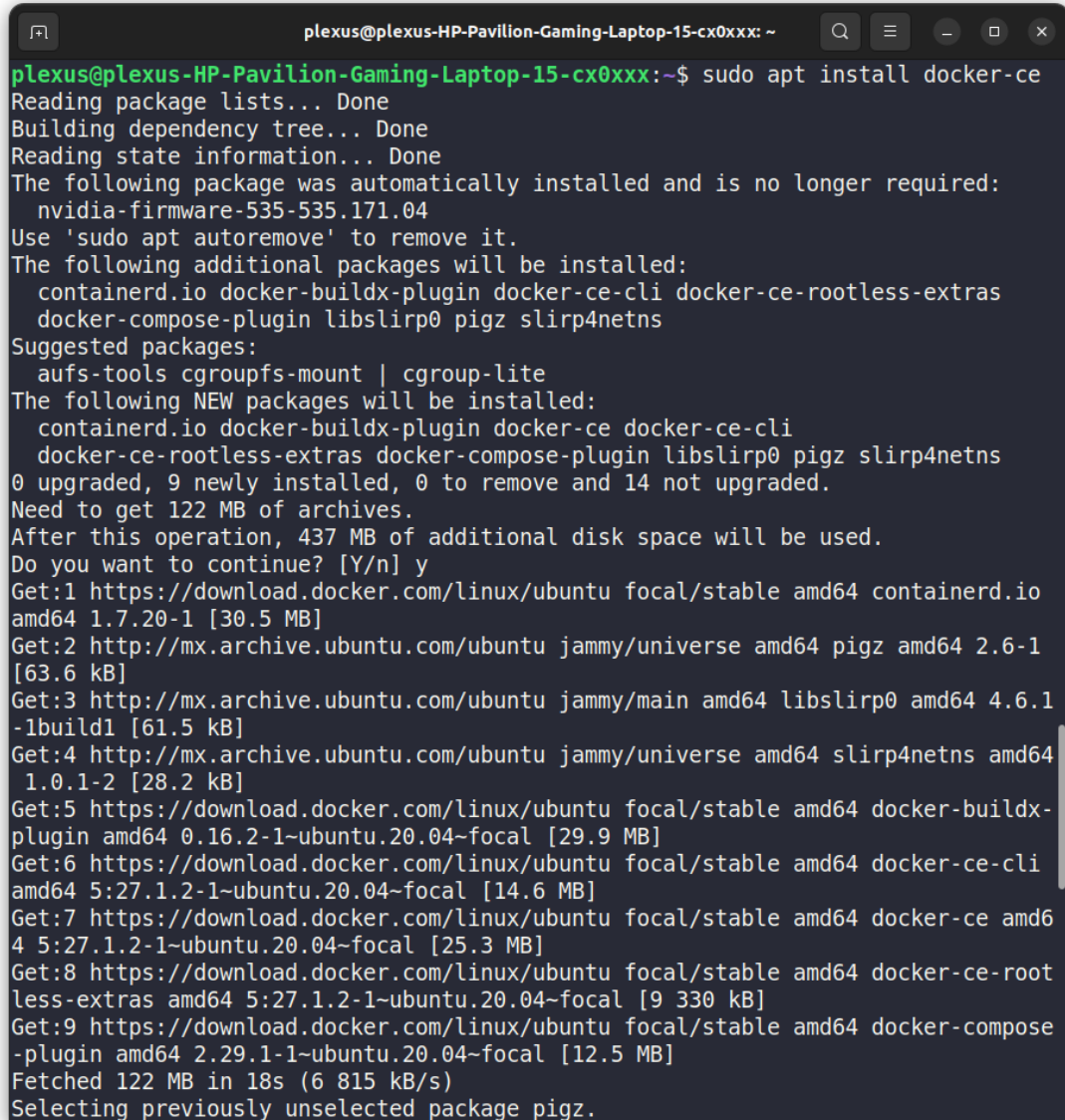
2. Clave de GPG para el repositorio de Docker, (error comando obsoleto)

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ 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 (s  
ee apt-key(8)).  
OK  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$
```

3. Agregando el repositorio a las fuentes APT, (advertencia).

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo add-apt-repository "de  
b [arch=amd64] https://download.docker.com/linux/ubuntu focal stable"  
Repository: 'deb [arch=amd64] https://download.docker.com/linux/ubuntu focal sta  
ble'  
Description:  
Archive for codename: focal components: stable  
More info: https://download.docker.com/linux/ubuntu  
Adding repository.  
Press [ENTER] to continue or Ctrl-c to cancel.  
Adding deb entry to /etc/apt/sources.list.d/archive_uri-https_download_docker_co  
m_linux_ubuntu-jammy.list  
Adding disabled deb-src entry to /etc/apt/sources.list.d/archive_uri-https_downl  
oad_docker_com_linux_ubuntu-jammy.list  
Get:1 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]  
Get:3 https://cli.github.com/packages stable InRelease [3 917 B]  
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]  
Hit:2 https://packages.microsoft.com/repos/code stable InRelease  
Get:5 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [48.8  
kB]  
Hit:6 http://mx.archive.ubuntu.com/ubuntu jammy InRelease  
Get:7 http://mx.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]  
Hit:8 https://ppa.launchpadcontent.net/inkscape.dev/stable/ubuntu jammy InReleas  
e  
Hit:9 http://mx.archive.ubuntu.com/ubuntu jammy-backports InRelease  
Fetched 367 kB in 2s (200 kB/s)  
Reading package lists... Done  
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 secti  
on in apt-key(8) for details.  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$
```

4. Instalación de Docker.



```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo apt install docker-ce
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  nvidia-firmware-535-535.171.04
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  containerd.io docker-buildx-plugin docker-ce-cli docker-ce-rootless-extras
  docker-compose-plugin libslirp0 pigz slirp4netns
Suggested packages:
  aufs-tools cgroupfs-mount | cgroup-lite
The following NEW packages will be installed:
  containerd.io docker-buildx-plugin docker-ce docker-ce-cli
  docker-ce-rootless-extras docker-compose-plugin libslirp0 pigz slirp4netns
0 upgraded, 9 newly installed, 0 to remove and 14 not upgraded.
Need to get 122 MB of archives.
After this operation, 437 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 1.7.20-1 [30.5 MB]
Get:2 http://mx.archive.ubuntu.com/ubuntu jammy/universe amd64 pigz amd64 2.6-1
[63.6 kB]
Get:3 http://mx.archive.ubuntu.com/ubuntu jammy/main amd64 libslirp0 amd64 4.6.1
-1build1 [61.5 kB]
Get:4 http://mx.archive.ubuntu.com/ubuntu jammy/universe amd64 slirp4netns amd64
1.0.1-2 [28.2 kB]
Get:5 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-buildx-
plugin amd64 0.16.2-1~ubuntu.20.04~focal [29.9 MB]
Get:6 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-cli
amd64 5:27.1.2-1~ubuntu.20.04~focal [14.6 MB]
Get:7 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce amd6
4 5:27.1.2-1~ubuntu.20.04~focal [25.3 MB]
Get:8 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-root
less-extras amd64 5:27.1.2-1~ubuntu.20.04~focal [9 330 kB]
Get:9 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-compose
-plugin amd64 2.29.1-1~ubuntu.20.04~focal [12.5 MB]
Fetched 122 MB in 18s (6 815 kB/s)
Selecting previously unselected package pigz.
```

5. Estatus de Docker.

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo systemctl status docke  
r  
● docker.service - Docker Application Container Engine  
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset  
   Active: active (running) since Fri 2024-08-23 18:49:06 CST; 1min 3s ago  
   TriggeredBy: ● docker.socket  
     Docs: https://docs.docker.com  
    Main PID: 36258 (dockerd)  
      Tasks: 14  
     Memory: 25.1M  
        CPU: 816ms  
    CGroup: /system.slice/docker.service  
            └─36258 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/con  
ago 23 18:49:02 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx systemd[1]: Starting  
ago 23 18:49:02 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:02 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:03 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:06 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:06 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:06 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:06 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:06 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx dockerd[36258]: time  
ago 23 18:49:06 plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx systemd[1]: Started  
lines 1-21/21 (END)
```

6. Hola Mundo.

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo docker run hello-world  
Unable to find image 'hello-world:latest' locally  
latest: Pulling from library/hello-world  
c1ec31eb5944: Pull complete  
Digest: sha256:53cc4d415d839c98be39331c948609b659ed725170ad2ca8eb36951288f81b75  
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.  
  
To try something more ambitious, you can run an Ubuntu container with:  
$ docker run -it ubuntu bash  
  
Share images, automate workflows, and more with a free Docker ID:  
https://hub.docker.com/  
  
For more examples and ideas, visit:  
https://docs.docker.com/get-started/  
  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$
```

7. Descarga de la imagen de postgres.

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo docker pull postgres  
Using default tag: latest  
latest: Pulling from library/postgres  
e4fff0779e6d: Pull complete  
3dd23fa89c28: Pull complete  
9110f5284332: Pull complete  
b2a5b191a941: Pull complete  
f0baaf1c42c6: Pull complete  
3c42bd6bf488: Pull complete  
cb55f9f5ebf8: Pull complete  
6eeec50ef8e1: Pull complete  
ba3d1f8aa002: Pull complete  
199cdf05dfec: Pull complete  
438d147df750: Pull complete  
a2e706f2e593: Pull complete  
2505d0b60422: Pull complete  
133de8acf4aa: Pull complete  
Digest: sha256:c62fdb7fd6f519ef425c54760894c74e8d0cb04fbf4f7d3d79aafd86bae24edd  
Status: Downloaded newer image for postgres:latest  
docker.io/library/postgres:latest  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$
```

8. Creación del contenedor.

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo docker run -d --name p  
ostgres -e POSTGRES_PASSWORD=2025 -p 5432:5432 postgres  
158305868c58adbe9da24fe17cd4d7aaca83e2df772d33150fbf90b8aafb8b96  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$
```

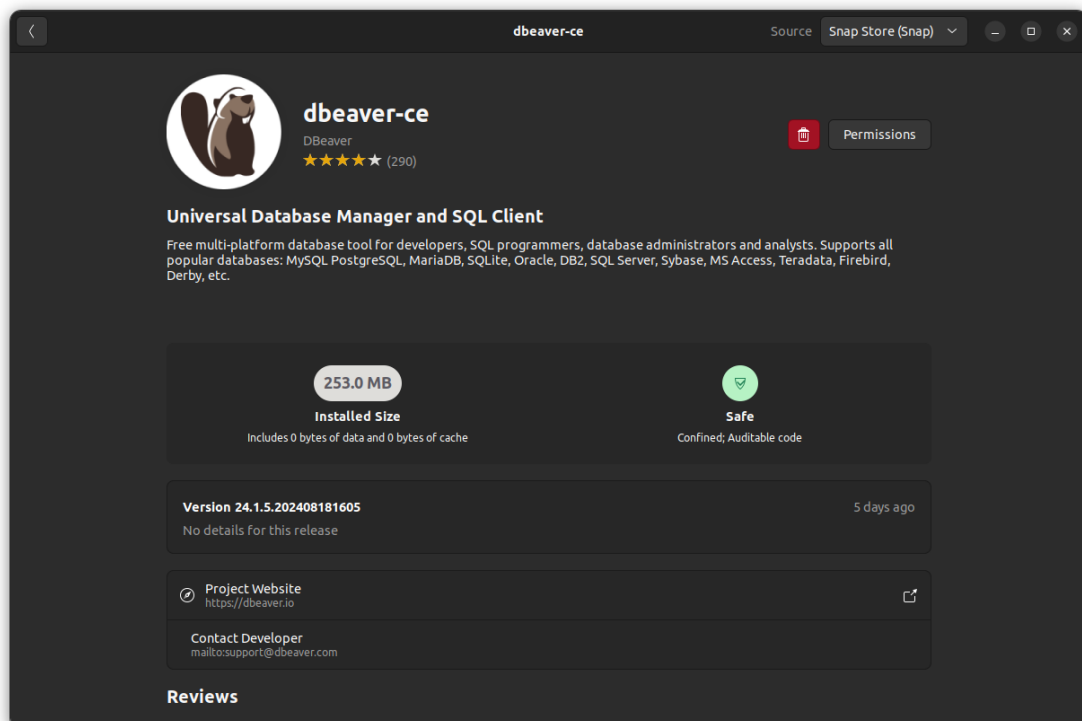
9. Inicialización del contenedor.

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo docker start 158305868  
c58adbe9da24fe17cd4d7aaca83e2df772d33150fbf90b8aafb8b96  
158305868c58adbe9da24fe17cd4d7aaca83e2df772d33150fbf90b8aafb8b96  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$
```

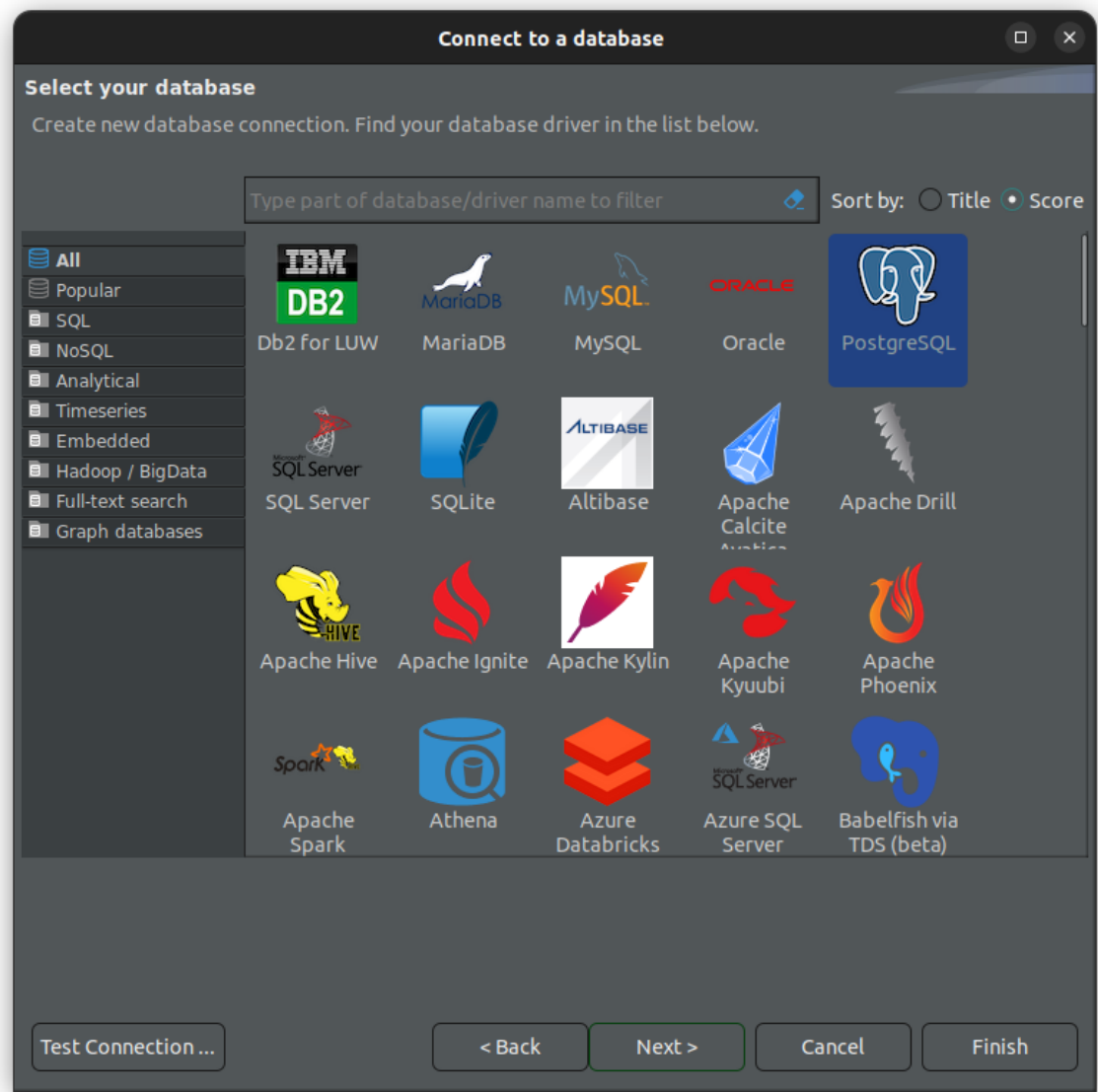
10. Conexión a PostgreSQL.

```
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx: ~  
plexus@plexus-HP-Pavilion-Gaming-Laptop-15-cx0xxx:~$ sudo docker run -it --link  
postgres:postgres postgres psql -h postgres -U postgres  
Password for user postgres:  
psql (16.4 (Debian 16.4-1.pgdg120+1))  
Type "help" for help.  
  
postgres=#
```

11. Instalación de DBeaver a través de la tienda Snap.



12. Conexión a DBeaver.



The image shows a 'Connect to a database' window with a dark theme. The title bar says 'Connect to a database'. Inside, the 'Connection Settings' section is active, showing 'PostgreSQL connection settings'. There are tabs for 'Main', 'PostgreSQL', 'Driver properties', 'SSH', and 'SSL'. A '+ Network configurations...' button is on the right. The 'Server' section has 'Connect by:' with 'Host' selected and 'URL' unselected. The 'URL' field contains 'jdbc:postgresql://localhost:5432/postgres'. The 'Host' field contains 'localhost' and the 'Port' field contains '5432'. The 'Database' field contains 'postgres' and there is a 'Show all databases' checkbox. The 'Authentication' section has 'Authentication:' set to 'Database Native', 'Username:' set to 'postgres', and 'Password:' masked with dots. There is a 'Save password' checkbox which is checked. The 'Advanced' section has 'Session role:' empty and 'Local Client:' set to '<not present>'. At the bottom, there are links for 'Connection variables information' and 'Database documentation', a 'Connection details (name, type, ...)' button, and a 'Driver name: PostgreSQL' label with a 'Driver Settings' button. At the very bottom are buttons for 'Test Connection ...', '< Back', 'Next >', 'Cancel', and 'Finish'.

Connect to a database

Connection Settings
PostgreSQL connection settings

Main PostgreSQL Driver properties SSH SSL + Network configurations...

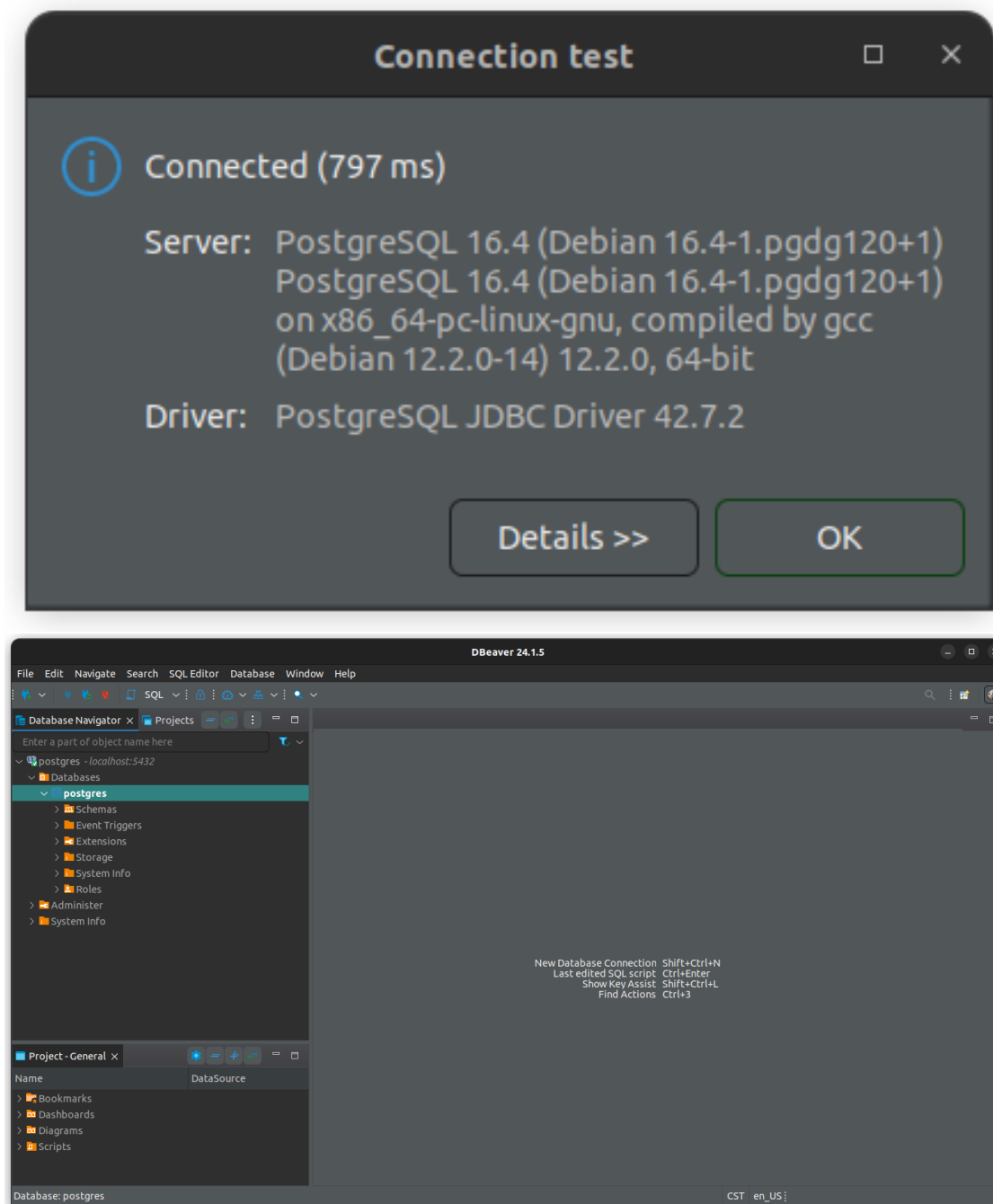
Server
Connect by: ☒ Host ☐ URL
URL: jdbc:postgresql://localhost:5432/postgres
Host: localhost Port: 5432
Database: postgres ☐ Show all databases

Authentication
Authentication: Database Native
Username: postgres
Password: ☒ Save password

Advanced
Session role: Local Client: <not present>

[Connection variables information](#) [Database documentation](#) Connection details (name, type, ...)
Driver name: PostgreSQL Driver Settings

Test Connection ... < Back Next > Cancel Finish



- Comentarios y problemas: Tuve mis dudas sobre el error y la advertencia en el paso 2 y 3 pero parece ser que no afectó en nada a la instalación (hasta lo que sé). Además, como no pude asistir al laboratorio, me tomó más tiempo seguir el tutorial por la parte de la conexión de DBeaver así que tuve que buscarlo en internet. Fuera de eso todo salió como se esperaba.