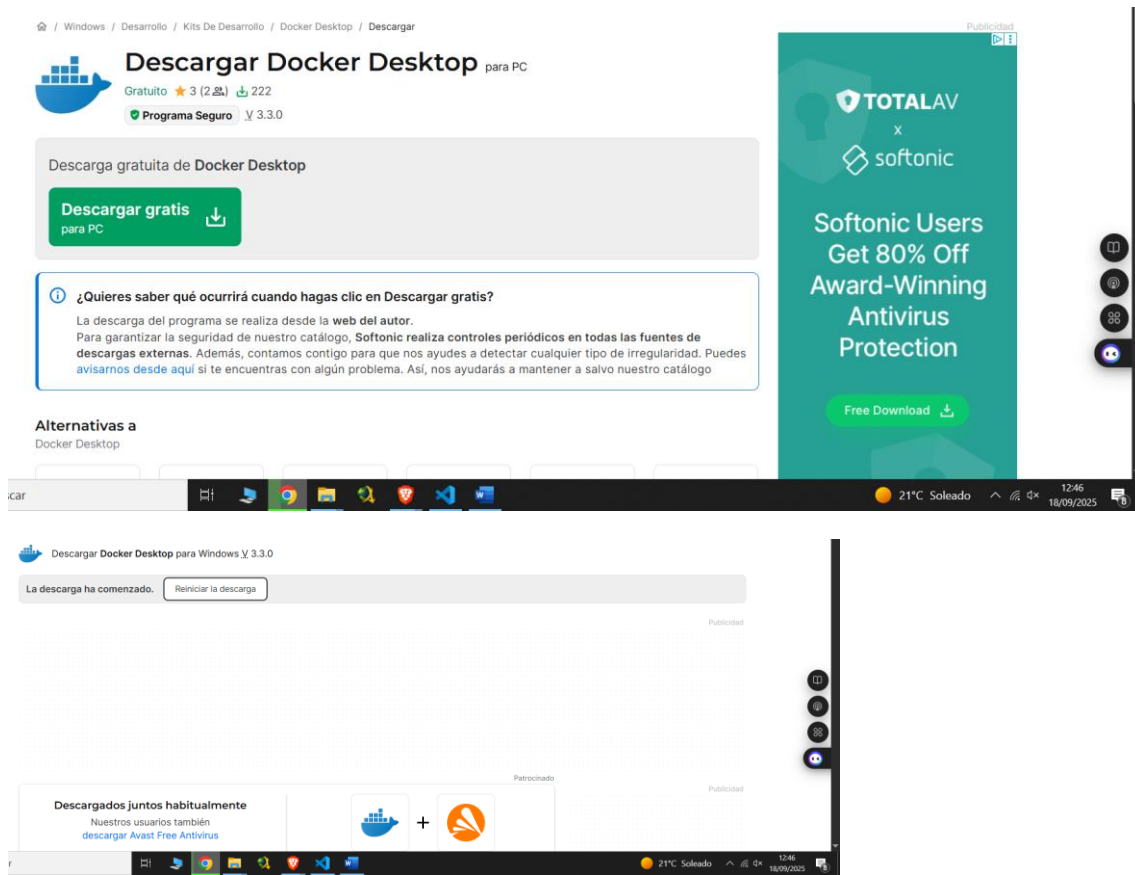
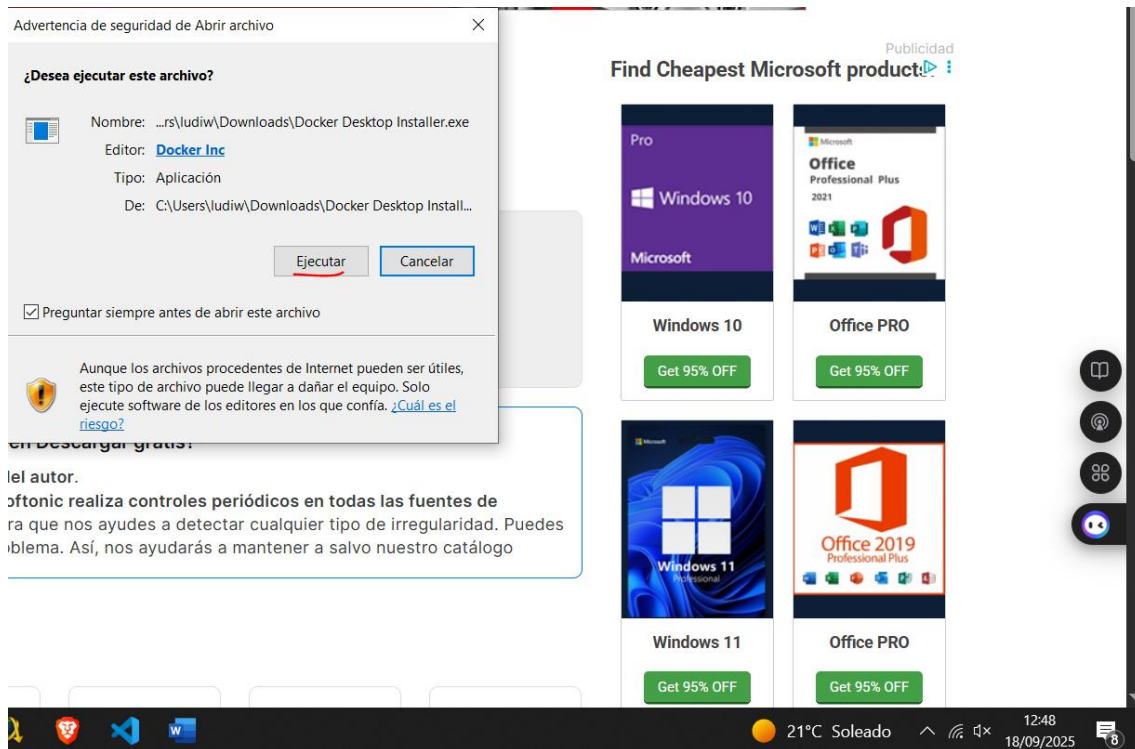


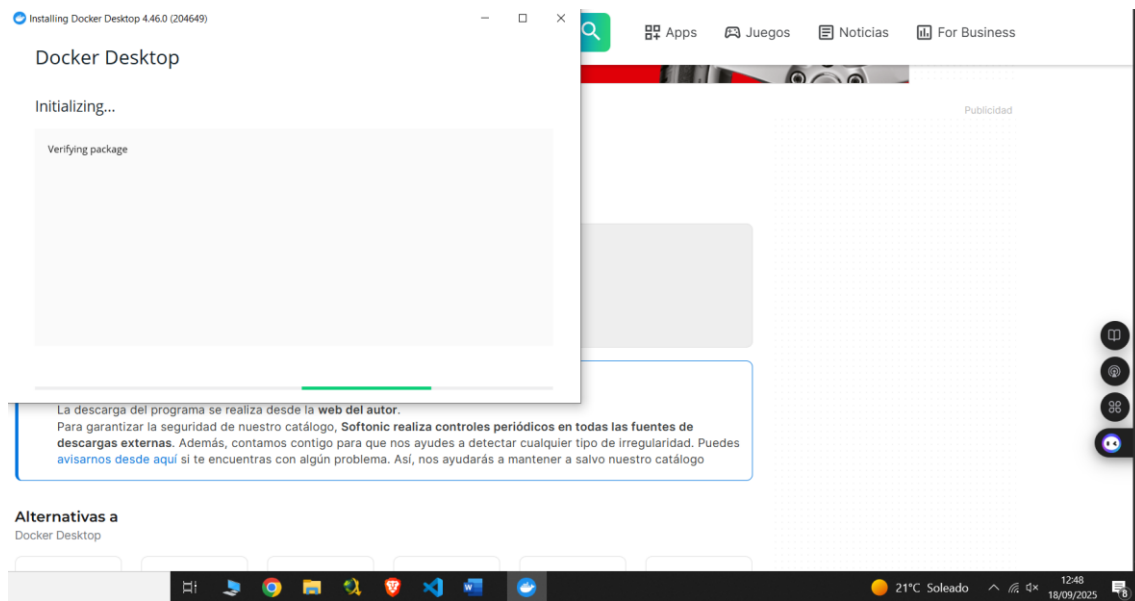
Instalamos el Docker



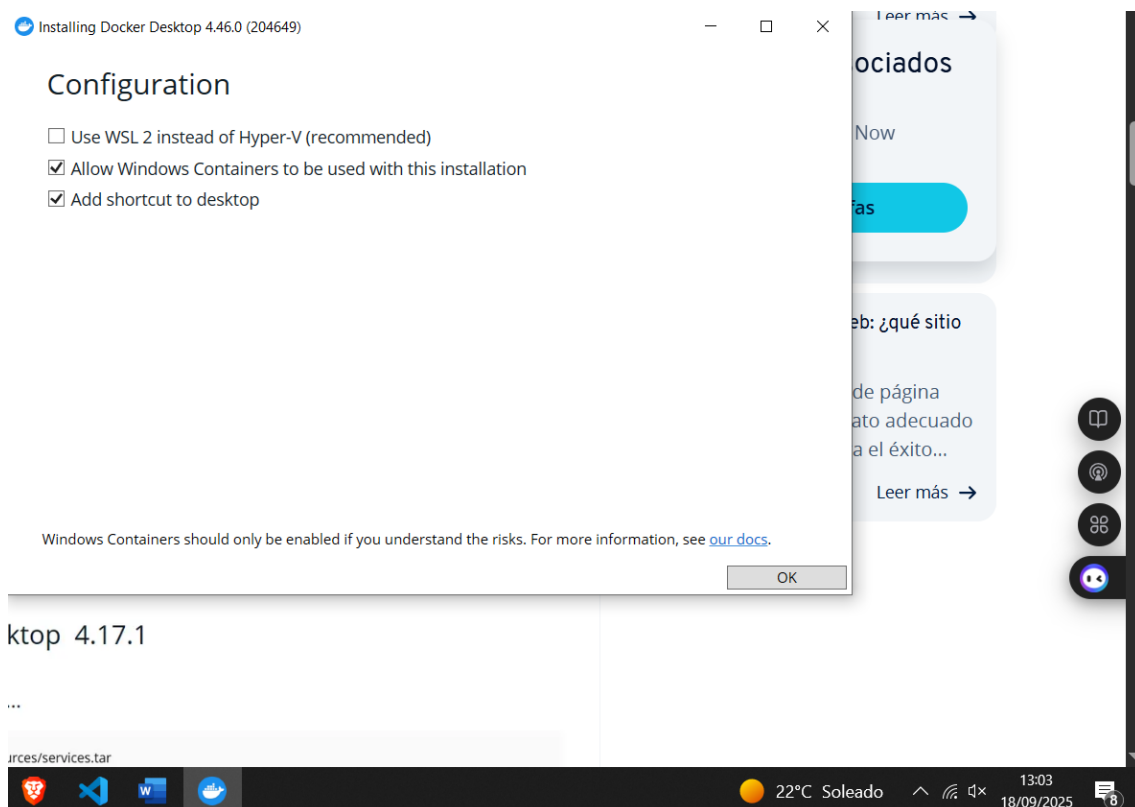
Le damos ha ejecutar



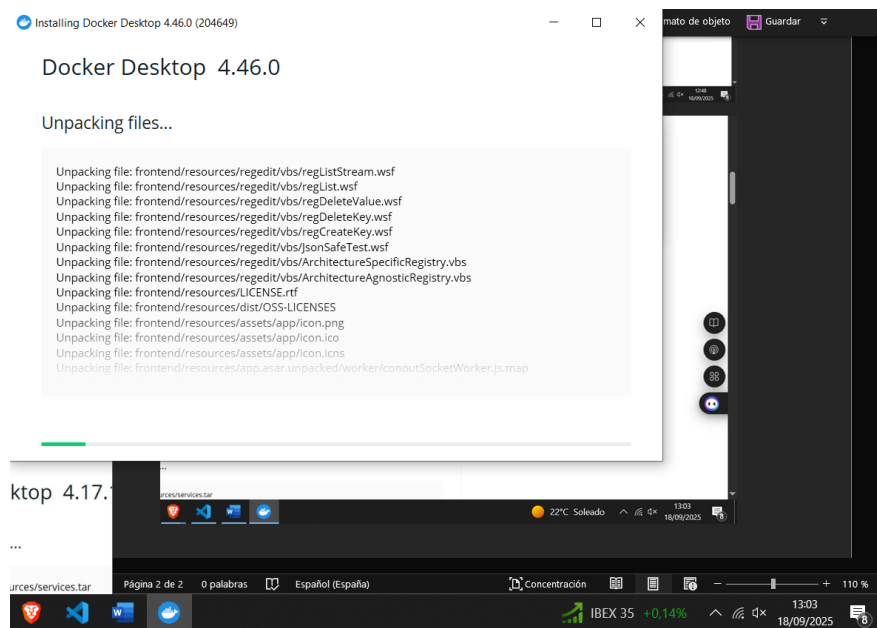
Y ya se estará instalando



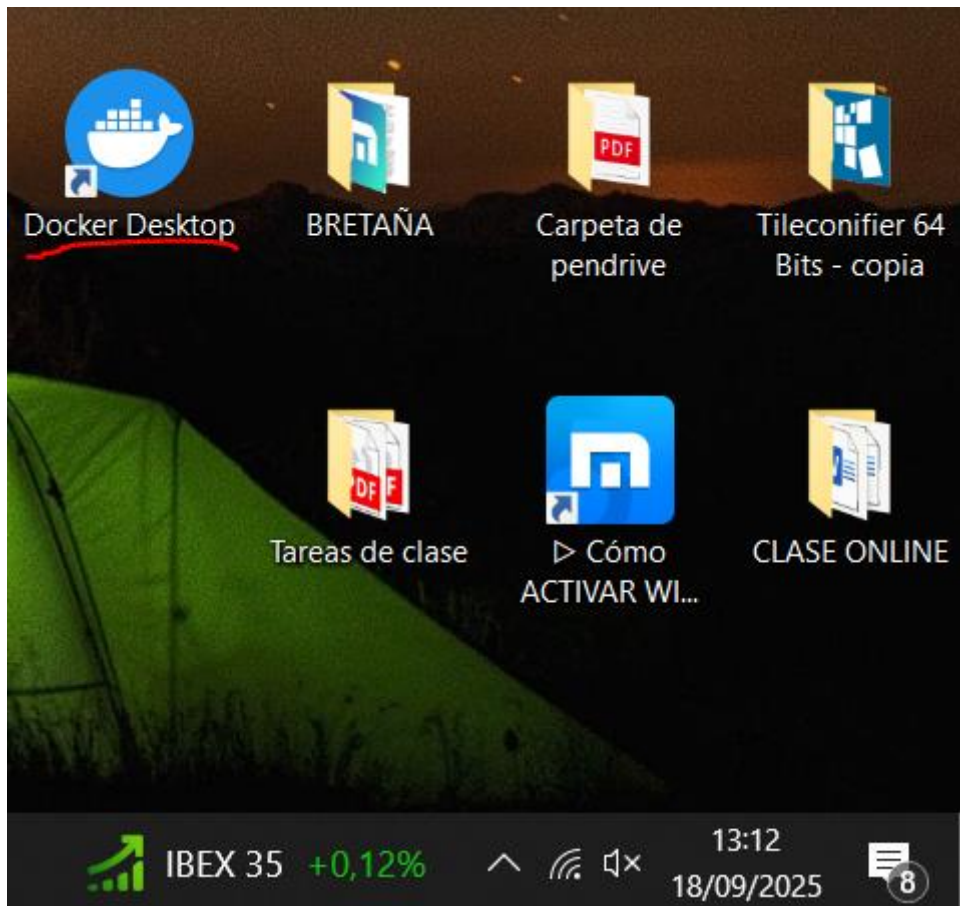
Le damos a las dos de abajo



Y ya se estarán instalando los paquetes



Ya tendremos el Docker en el escritorio



Ponemos el Docker para que nos muestre la ayuda de sus comandos

```

Símbolo del sistema - docker run -it --name alpine-container --rm alpine
Microsoft Windows [Versión 10.0.19045.6332]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\ludiw>docker
Usage: docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Common Commands:
run          Create and run a new container from an image
exec         Execute a command in a running container
ps           List containers
build        Build an image from a Dockerfile
bake         Build from a file
pull         Download an image from a registry
push         Upload an image to a registry
images       List images
login        Authenticate to a registry
logout       Log out from a registry
search       Search Docker Hub for images
version      Show the Docker version information
info         Display system-wide information

Management Commands:
ai*          Docker AI Agent - Ask Gordon
builder      Manage builds
buildx*      Docker Buildx
checkpoint   Manage checkpoints
cloud*       Docker Cloud
compose*     Docker Compose
  
```

Este comando sirve para iniciar un contenedor y entrar dentro para interactuar

```

Símbolo del sistema - docker run -it --name alpine-container --rm alpine

C:\Users\ludiw>docker run -it --name alpine-container --rm alpine
docker: error during connect: Head "http://%2F%2F.%2Fpipe%2FdockerDesktopLinuxEngine/_ping": open //.pipe/dockerDesktopLinuxEngine: El sistema no puede encontrar el archivo especificado.

Run 'docker run --help' for more information

C:\Users\ludiw>docker run -it --name alpine-container --rm alpine
docker: error during connect: Head "http://%2F%2F.%2Fpipe%2FdockerDesktopLinuxEngine/_ping": open //.pipe/dockerDesktopLinuxEngine: El sistema no puede encontrar el archivo especificado.

Run 'docker run --help' for more information

C:\Users\ludiw>docker run -it --name alpine-container --rm alpine
Unable to find image 'alpine:latest' locally
latest: Pulling from library/alpine
9824c27679d3: Pull complete
Digest: sha256:4bcff63911fcb4448bd4fdac207030997caf25e9bea4045fa6c8c44de311d1
Status: Downloaded newer image for alpine:latest
/#
  
```

Para salir del contenedor escribimos el siguiente comando:

```
Símbolo del sistema
/ # -i
/bin/sh: -i: not found
/ # exit
C:\Users\ludiw>
```

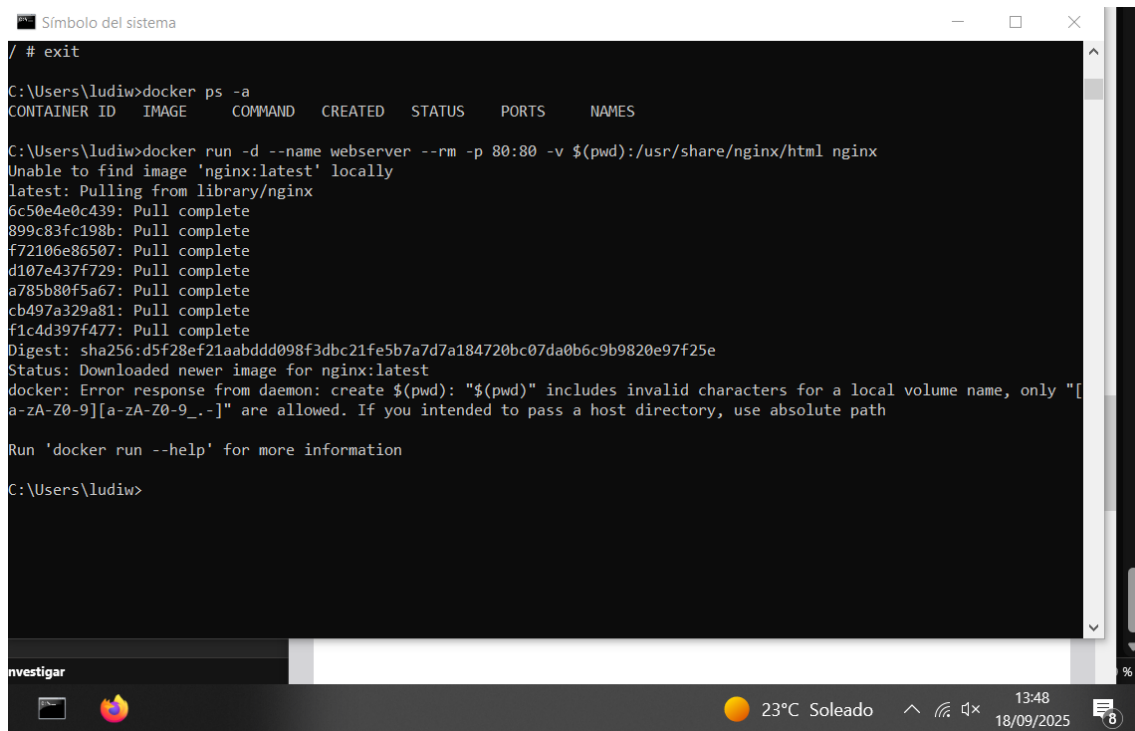
Como hemos iniciado el contenedor con el parámetro `--rm`, al salir del contenedor, éste se

elimina y no ocupa espacio en nuestro disco. Podemos comprobarlo con el siguiente

comando

```
Símbolo del sistema
/ # exit
C:\Users\ludiw>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
C:\Users\ludiw>
```

Creación de un contenedor con Nginx en modo detached



```

# exit

C:\Users\ludiw>docker ps -a
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES

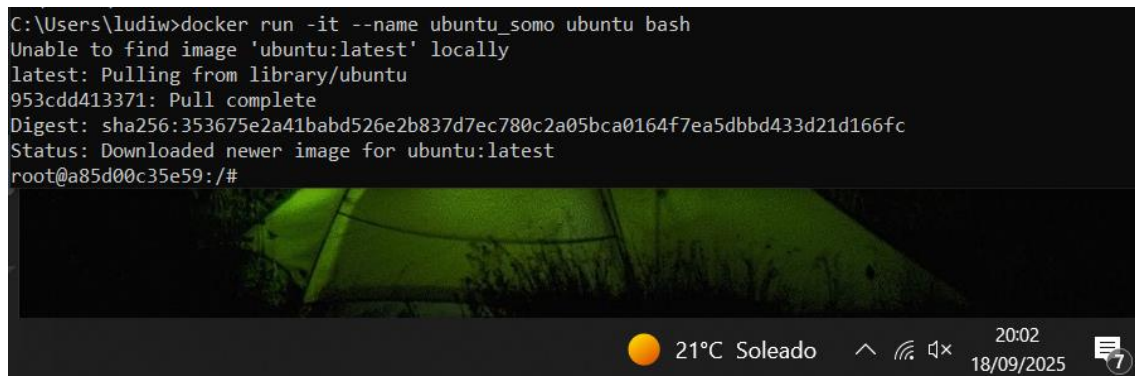
C:\Users\ludiw>docker run -d --name webservice --rm -p 80:80 -v $(pwd):/usr/share/nginx/html nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
6c50e4e0c439: Pull complete
899c83fc198b: Pull complete
f72106e86507: Pull complete
d107e437f729: Pull complete
a785b80f5a67: Pull complete
cb497a329a81: Pull complete
f1c4d397f477: Pull complete
Digest: sha256:d5f28ef21aabddd098f3dbc21fe5b7a7d7a184720bc07da0b6c9b9820e97f25e
Status: Downloaded newer image for nginx:latest
docker: Error response from daemon: create $(pwd): "$ (pwd)" includes invalid characters for a local volume name, only "[a-zA-Z0-9][a-zA-Z0-9_-.]" are allowed. If you intended to pass a host directory, use absolute path

Run 'docker run --help' for more information

C:\Users\ludiw>
  
```

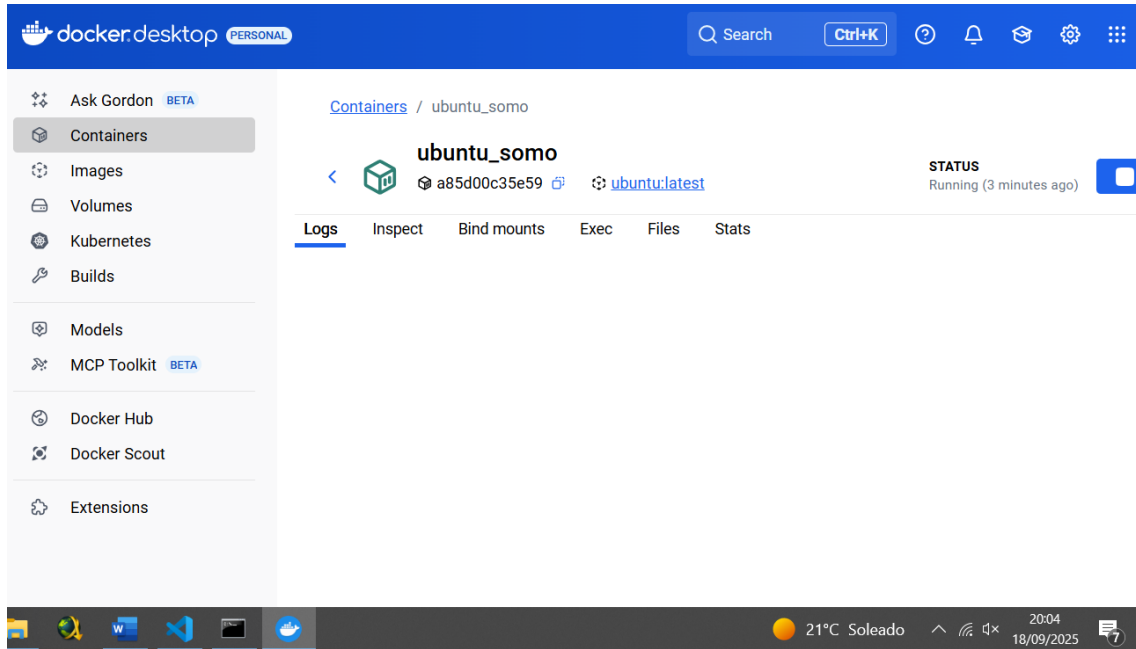
Ejercicios

- Crea un contenedor en modo interactivo con el nombre ubuntu_somo, que se elimine al salir y que coja, obviamente, una imagen de ubuntu.



```

C:\Users\ludiw>docker run -it --name ubuntu_somo ubuntu bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
953cdd413371: Pull complete
Digest: sha256:353675e2a41babd526e2b837d7ec780c2a05bca0164f7ea5dbbd433d21d166fc
Status: Downloaded newer image for ubuntu:latest
root@a85d00c35e59:/#
  
```



● Crea contenedor en modo interactivo con el nombre `webserver`, que se elimine al salir y que coja una imagen de `nginx`. Por otro lado vas a tener que enlazar el puerto 80 de tu contenedor con el 80 de tu ordenador, para ello (aparte de investigar un poco) vas a tener que usar el parámetro `-p`.

■ Símbolo del sistema - `docker run -it --rm --name webserver -p 80:80 nginx`

```
:~\Users\ludiw>docker run -it --rm --name webserver -p 80:80 nginx
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2025/09/18 18:07:40 [notice] 1#1: using the "epoll" event method
2025/09/18 18:07:40 [notice] 1#1: nginx/1.29.1
2025/09/18 18:07:40 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14+deb12u1)
2025/09/18 18:07:40 [notice] 1#1: OS: Linux 6.10.14-linuxkit
2025/09/18 18:07:40 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2025/09/18 18:07:40 [notice] 1#1: start worker processes
2025/09/18 18:07:40 [notice] 1#1: start worker process 29
2025/09/18 18:07:40 [notice] 1#1: start worker process 30
2025/09/18 18:07:40 [notice] 1#1: start worker process 31
2025/09/18 18:07:40 [notice] 1#1: start worker process 32
2025/09/18 18:07:40 [notice] 1#1: start worker process 33
2025/09/18 18:07:40 [notice] 1#1: start worker process 34
2025/09/18 18:07:40 [notice] 1#1: start worker process 35
2025/09/18 18:07:40 [notice] 1#1: start worker process 36
2025/09/18 18:07:40 [notice] 1#1: start worker process 37
2025/09/18 18:07:40 [notice] 1#1: start worker process 38
2025/09/18 18:07:40 [notice] 1#1: start worker process 39
2025/09/18 18:07:40 [notice] 1#1: start worker process 40
```

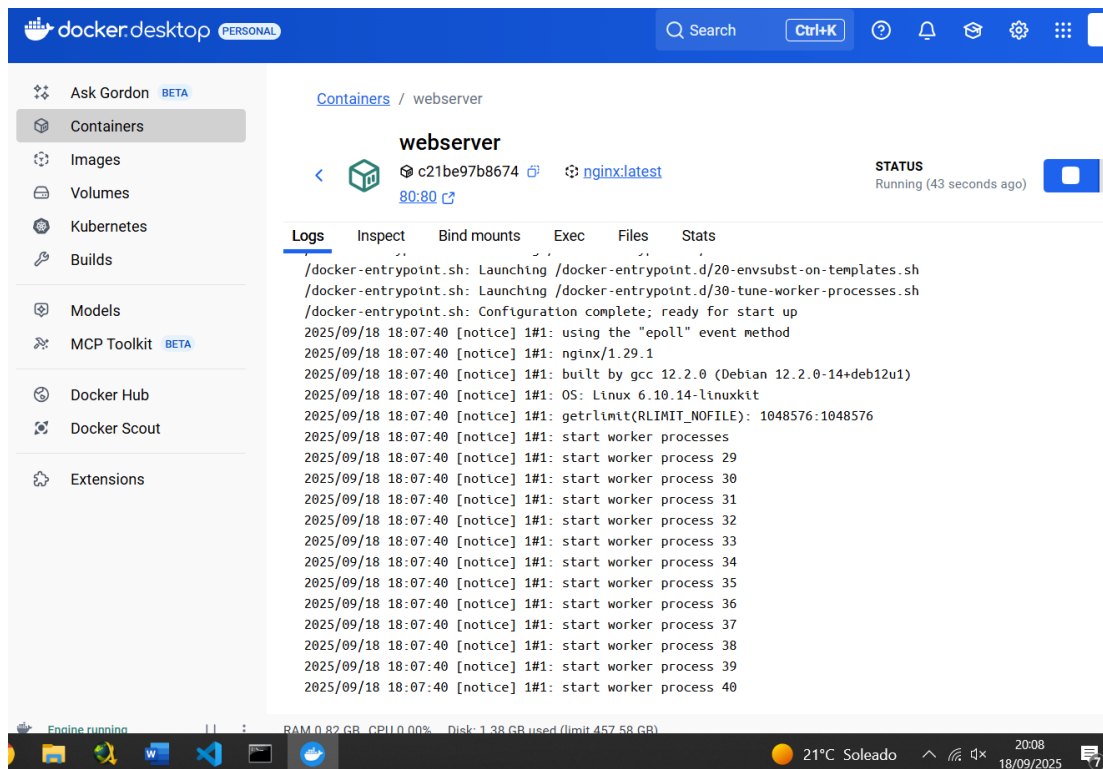
root@ba85d00c35e59:/#

```
root@ba85d00c35e59:/# docker run -it --rm --name webserver -p 80:80 nginx
nginx: error while loading shared libraries: libssl.so.3: cannot open shared object file: No such file or directory
```

d not found

20°C Soleado

18/09/2025 20:07



- Crea un contenedor en modo detached con el nombre mysql que se elimine al salir, que tenga los puertos 3306 enlazados, con un volumen desde pwd hasta /var/lib/mysql y que el parámetro MYSQL_ROOT_PASSWORD sea root.

```
C:\Users\ludiw>docker run -d --rm --name mysql -p 3307:3306 -v %cd%\mysql_data\var\lib\mysql -e MYSQL_ROOT_PASSWORD=root mysql
7692a696b6e859bfa136a5650a9e692cbfa379ac42cdfef2f5fcc299746a882
C:\Users\ludiw>
```

