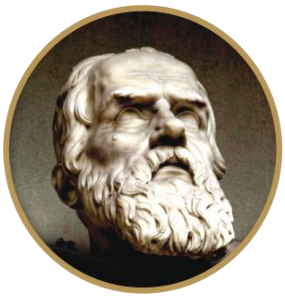
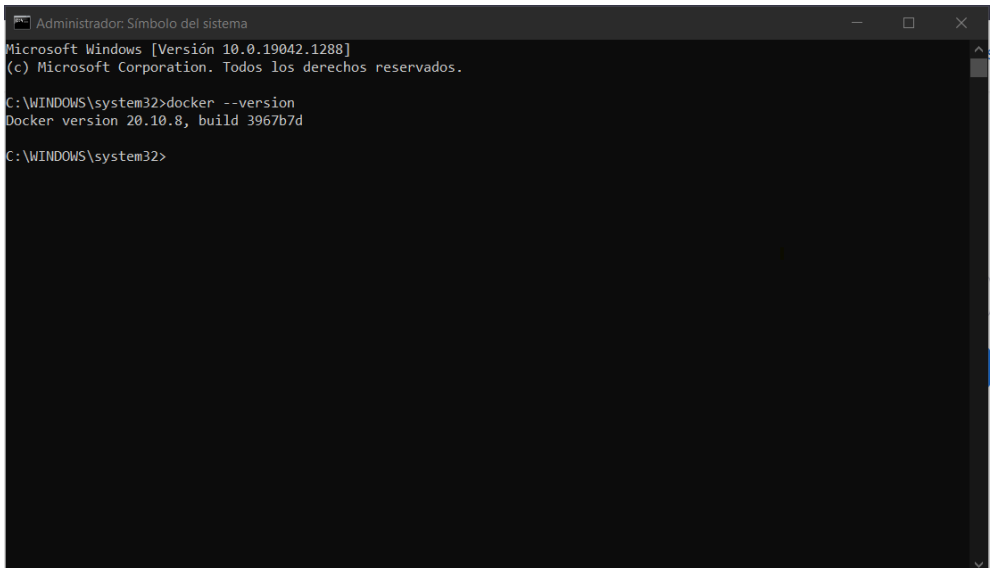
Willy Tut
Octubre 2021



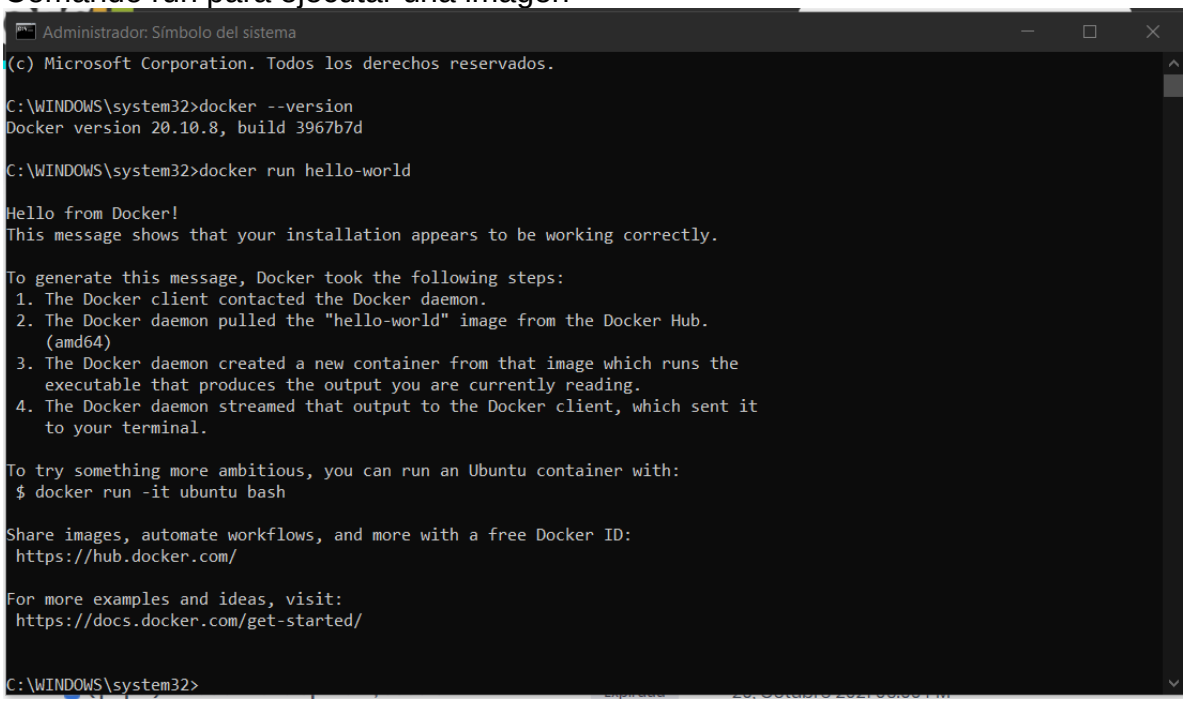
Galileo UNIVERSIDAD
La Revolución en la Educación

Clase 1 Docker

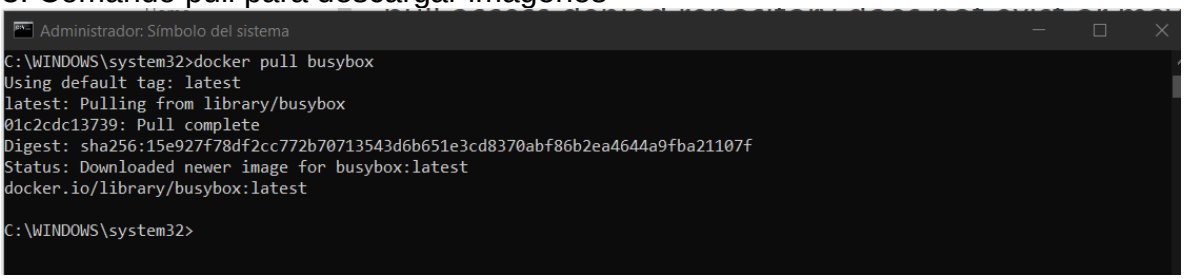
1. Comprobando Docker en el equipo



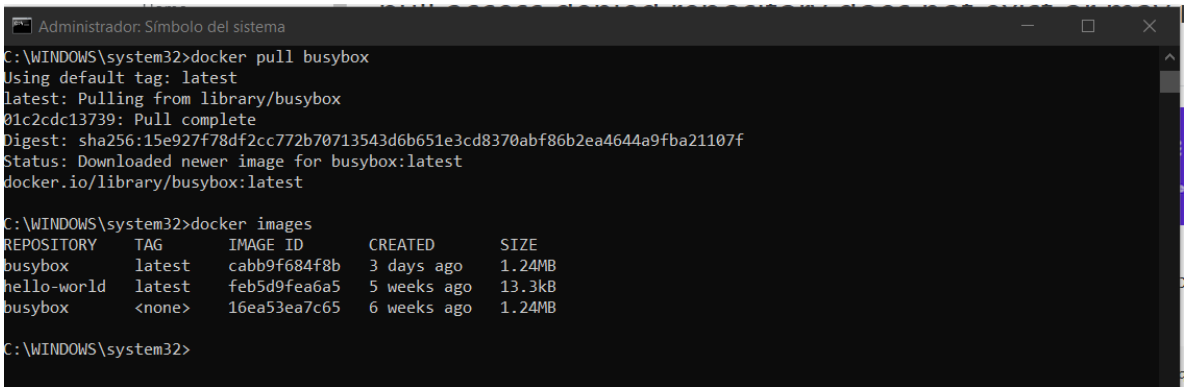
2. Comando run para ejecutar una imagen



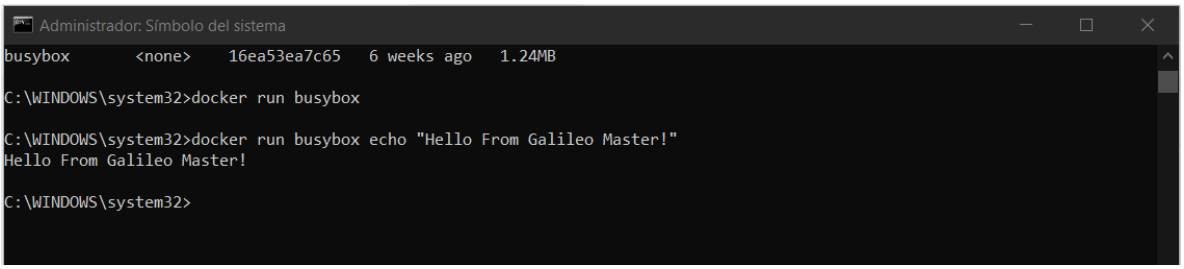
3. Comando pull para descargar imágenes



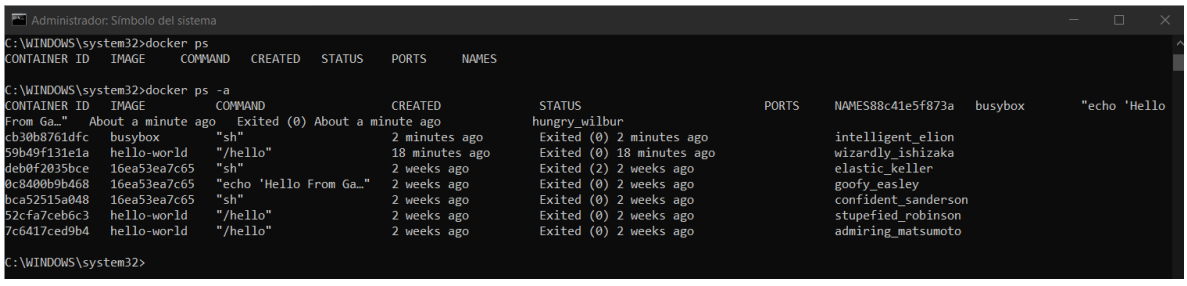
4. Comando images para ver el listado de imágenes instaladas



5. Comando run con algunos parámetros



6. Comando ps -a para ver contendores ejecutados anteriormente



7. Ingresando al contenedor

```
:\WINDOWS\system32>docker run -it busybox sh
/ # ls
bin   dev   etc   home  proc  root  sys   tmp   usr   var
/ # optane
sh: optane: not found
/ # uptime
 17:38:51 up  9:28,  0 users,  load average: 0.00, 0.00, 0.00
/ # cd home
/home # ls
/home # cd ..
/ # cd var/
/var # ls
spool  www
/var # exit
```

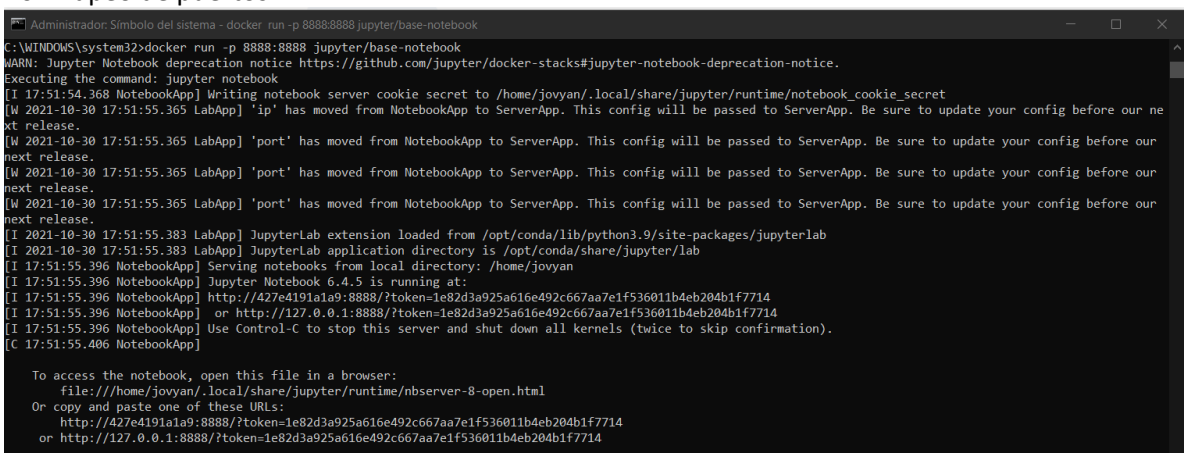
8. Comando rm para borrar contenedores

```
Administrador: Símbolo del sistema

C:\WINDOWS\system32>docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED          STATUS                      PORTS     NAMES
9d05dad3ac10   busybox        "sh"                     4 minutes ago    Exited (0) 58 seconds ago             suspicious_jackson
88c41e5f873a   busybox        "echo 'Hello From Ga…"   8 minutes ago    Exited (0) 8 minutes ago              hungry_wilbur
cb30b8761dfc   busybox        "sh"                     8 minutes ago    Exited (0) 8 minutes ago              intelligent_elion
59b49f131e1a   hello-world    "/hello"                 25 minutes ago   Exited (0) 25 minutes ago             wizardly_ishizaka
deb0f2035bce   16ea53ea7c65   "sh"                     2 weeks ago      Exited (2) 2 weeks ago                elastic_keller
0c8400b9b468   16ea53ea7c65   "echo 'Hello From Ga…"   2 weeks ago      Exited (0) 2 weeks ago                goofy_easley
bca52515a048   16ea53ea7c65   "sh"                     2 weeks ago      Exited (0) 2 weeks ago                confident_sanderson
52cfa7ceb6c3   hello-world    "/hello"                 2 weeks ago      Exited (0) 2 weeks ago                stupefied_robinson
7c6417ced9b4   hello-world    "/hello"                 2 weeks ago      Exited (0) 2 weeks ago                admiring_matsumoto

C:\WINDOWS\system32>docker rm 9d05dad3ac10 88c41e5f873a
9d05dad3ac10
88c41e5f873a

C:\WINDOWS\system32>docker rm intelligent_elion
intelligent_elion

C:\WINDOWS\system32>
```

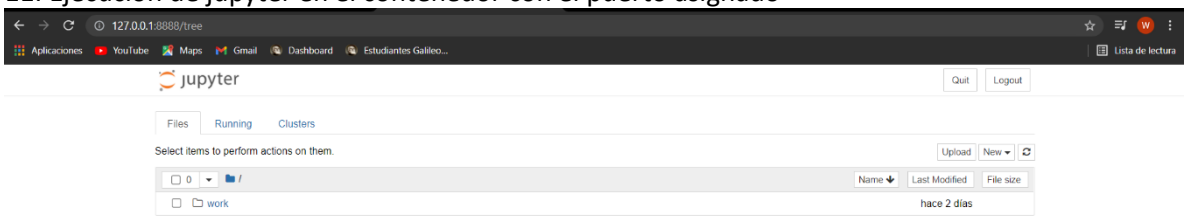
9. Descargando la imagen jupyter/base-notebook

```
Administrador: Símbolo del sistema
C:\WINDOWS\system32>docker pull jupyter/base-notebook
Using default tag: latest
latest: Pulling from jupyter/base-notebook
7b1a6ab2e44d: Pull complete
aae7ac7ba423: Pull complete
ac5e015e0bca: Pull complete
d7ee77f7580c: Pull complete
a5db759ff9c8: Pull complete
c464ee64836c: Pull complete
ae5313d07705: Pull complete
0c52b58dd46b: Pull complete
6030cc7cf343: Pull complete
25203b1e1be1: Pull complete
464a3cf035e8: Pull complete
Digest: sha256:5876e42c22c5df950880518f13f9c8e08b2c8fd50d1072519887735c14ee63f7
Status: Downloaded newer image for jupyter/base-notebook:latest
docker.io/jupyter/base-notebook:latest

C:\WINDOWS\system32>
```

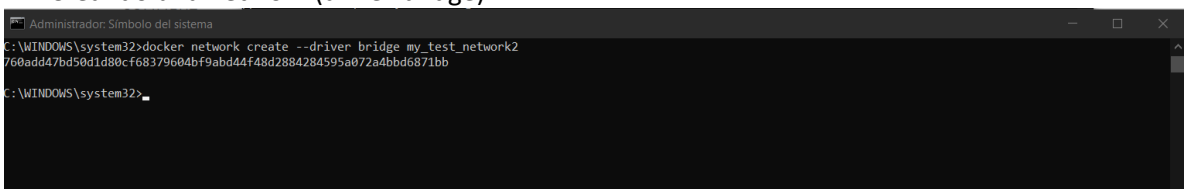
10. Mapeo de puertos



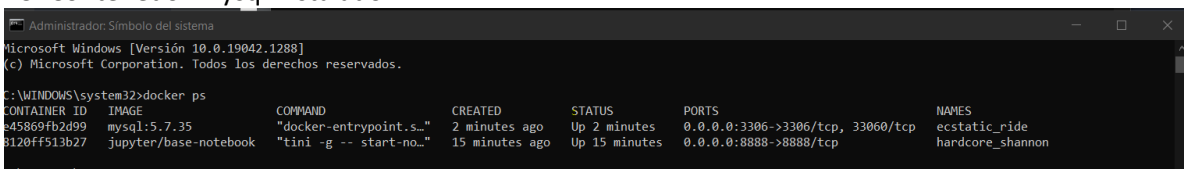
11. Ejecución de jupyter en el contenedor con el puerto asignado



12. Creando una network (driver bridge)



13. Contenedor mysql instalado



14. Contenedores funcionando en la misma red

```
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C:\WINDOWS\system32>docker run -p 8888:8888 --network my_test_network2 jupyter/base-notebook
WARN: Jupyter Notebook deprecation notice https://github.com/jupyter/docker-stacks#jupyter-notebook-deprecation-notice.
Executing the command: jupyter notebook
[I 18:49:22.780 NotebookApp] Writing notebook server cookie secret to /home/jovyan/.local/share/jupyter/runtime/notebook
_cookie_secret
[W 2021-10-30 18:49:23.658 LabApp] 'ip' has moved from NotebookApp to ServerApp. This config will be passed to ServerApp
. Be sure to update your config before our next release.
[W 2021-10-30 18:49:23.658 LabApp] 'port' has moved from NotebookApp to ServerApp. This config will be passed to ServerA
pp. Be sure to update your config before our next release.
[W 2021-10-30 18:49:23.658 LabApp] 'port' has moved from NotebookApp to ServerApp. This config will be passed to ServerA
pp. Be sure to update your config before our next release.
[W 2021-10-30 18:49:23.658 LabApp] 'port' has moved from NotebookApp to ServerApp. This config will be passed to ServerA
pp. Be sure to update your config before our next release.
[I 2021-10-30 18:49:23.668 LabApp] JupyterLab extension loaded from /opt/conda/lib/python3.9/site-packages/jupyterlab
[I 2021-10-30 18:49:23.668 LabApp] JupyterLab application directory is /opt/conda/share/jupyter/lab
[I 18:49:23.675 NotebookApp] Serving notebooks from local directory: /home/jovyan
[I 18:49:23.675 NotebookApp] Jupyter Notebook 6.4.5 is running at:
[I 18:49:23.675 NotebookApp] http://1df93f0db8ac:8888/?token=d511b509a5ebe0c1bb0e99b357a2a15e5397d6b60989eba4
[I 18:49:23.675 NotebookApp]  or http://127.0.0.1:8888/?token=d511b509a5ebe0c1bb0e99b357a2a15e5397d6b60989eba4
[I 18:49:23.676 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 18:49:23.681 NotebookApp]

    To access the notebook, open this file in a browser:
        file:///home/jovyan/.local/share/jupyter/runtime/nbserver-7-open.html
    Or copy and paste one of these URLs:
        http://1df93f0db8ac:8888/?token=d511b509a5ebe0c1bb0e99b357a2a15e5397d6b60989eba4
     or http://127.0.0.1:8888/?token=d511b509a5ebe0c1bb0e99b357a2a15e5397d6b60989eba4
```
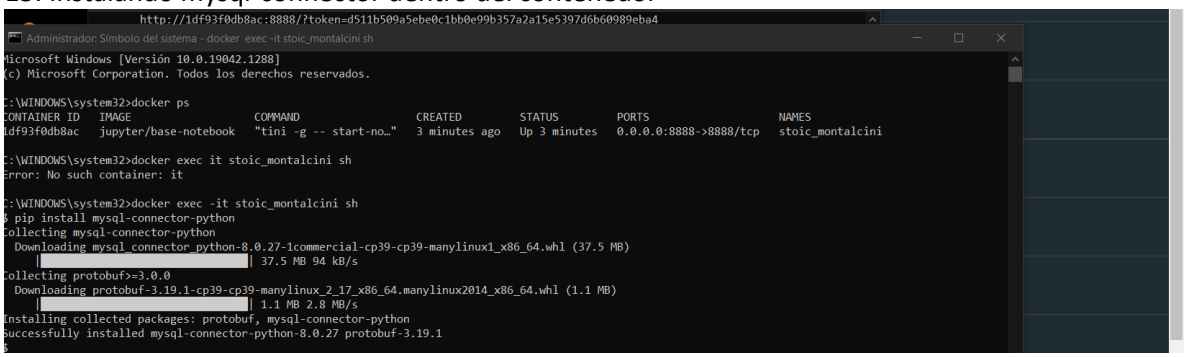

15. Instalando mysql-connector dentro del contenedor



16. Instalando otras librerías dentro del contendor