

Fundamentos de la nube

Universidad modelo “Ingeniería en Desarrollo y Tecnología en Software”

Digital Ocean

Universidad Modelo

Alumno:

Serrano Soto Jorge Said

Mtro. Maestro:

Alfredo Jose Bolio Dominguez

Fecha:

26/03/2020



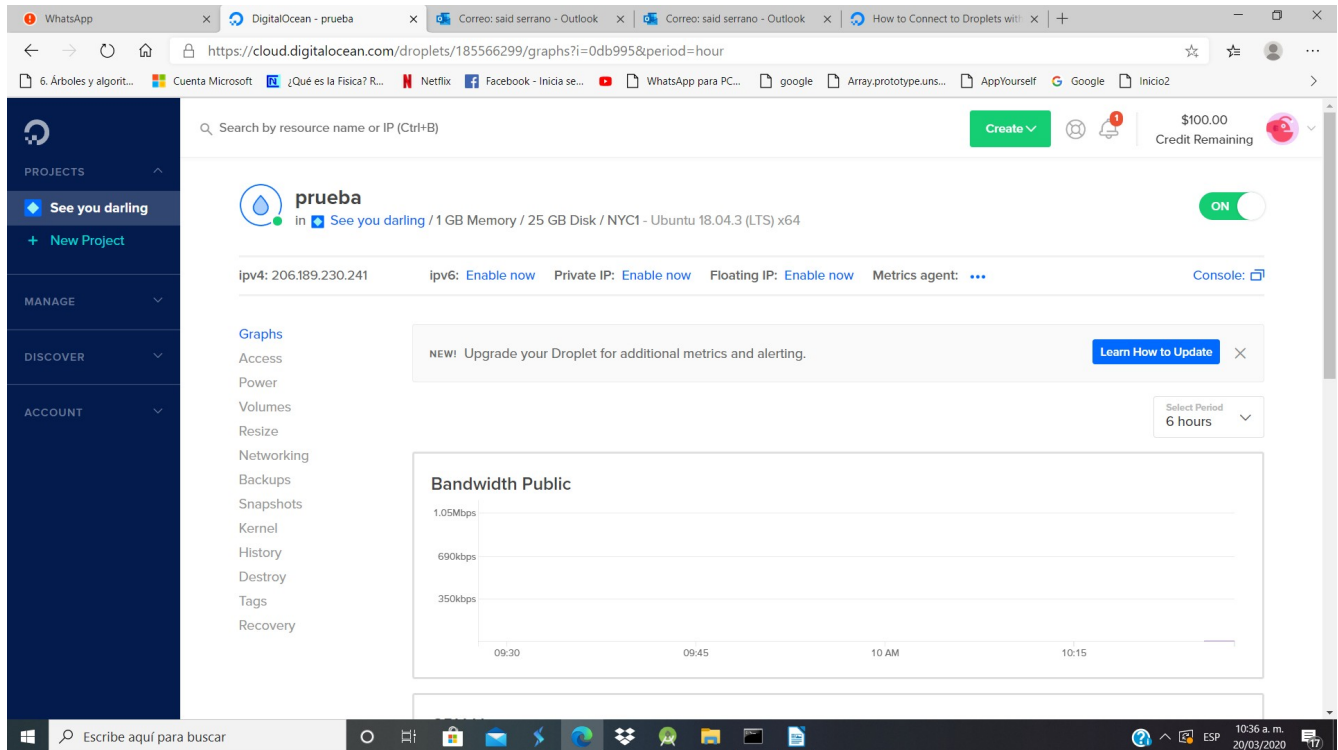
Creación del droplet:

-Explicación:

En cuanto a la creación del droplet se tomara en cuenta d que este se llamara prueba y sera creado en DigitalOcean.

-Dirección IP

206.189.230.241



Acceso via ssh

-Software de conexión:

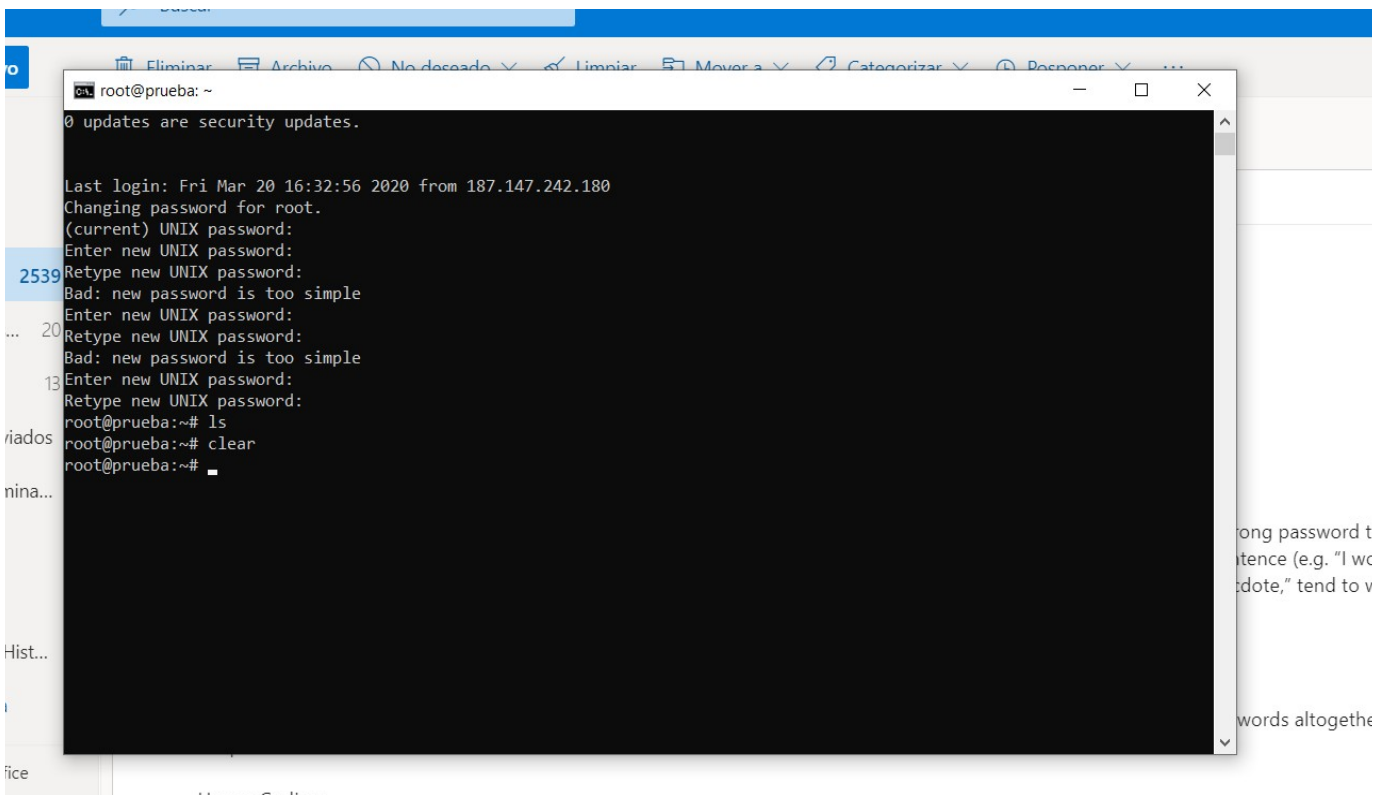
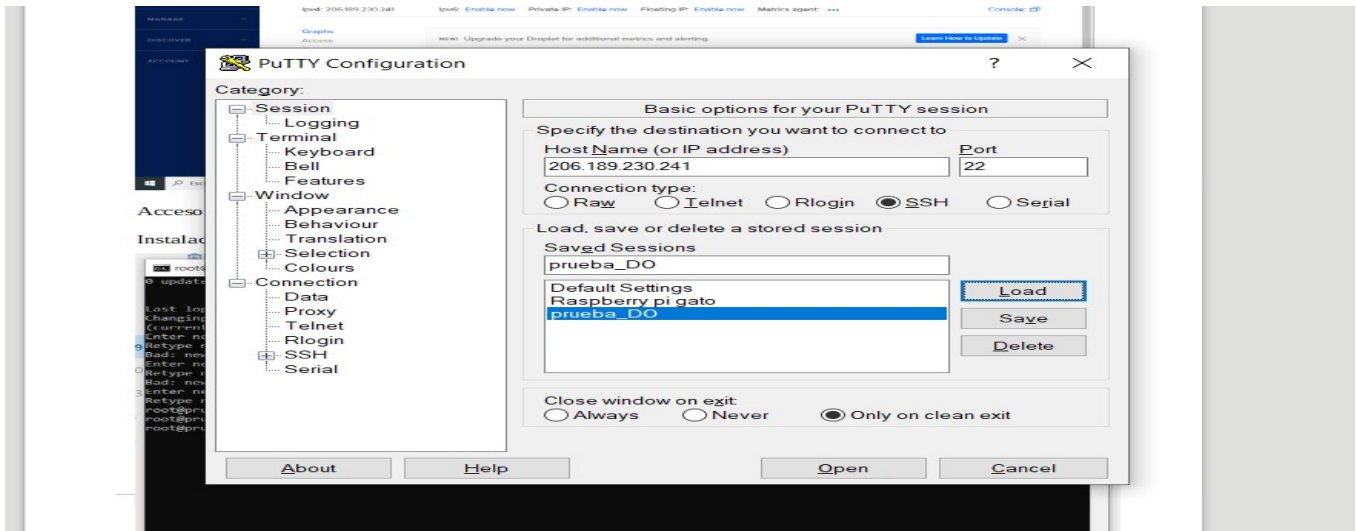
Putty

-Puerto:

22

-Tipo de conexión:

SSH



Instalación de docker y correr docker ps

-Sistema operativo:

Ubuntu 18.04

```
root@prueba:~#
500 https://download.docker.com/linux/ubuntu bionic/stable amd64 Packages
18.03.1-ce-3-0-ubuntu 500
500 https://download.docker.com/linux/ubuntu bionic/stable amd64 Packages
root@prueba:~# sudo apt install docker-ce
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  grub-pc-bin
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  aufs-tools cgroupfs-mount containerd.io docker-ce-cli libltdl7 pigz
The following NEW packages will be installed:
  aufs-tools cgroupfs-mount containerd.io docker-ce docker-ce-cli libltdl7 pigz
0 upgraded, 7 newly installed, 0 to remove and 107 not upgraded.
Need to get 85.8 MB of archives.
After this operation, 385 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://mirrors.digitalocean.com/ubuntu bionic/universe amd64 pigz amd64 2.4-1 [57.4 kB]
Get:2 https://download.docker.com/linux/ubuntu bionic/stable amd64 containerd.io amd64 1.2.13-1 [20.1 MB]
Get:3 http://mirrors.digitalocean.com/ubuntu bionic/universe amd64 aufs-tools amd64 1:4.9+20170918-1ubuntu1 [104 kB]
Get:4 http://mirrors.digitalocean.com/ubuntu bionic/universe amd64 cgroupfs-mount all 1.4 [6320 B]
Get:5 http://mirrors.digitalocean.com/ubuntu bionic/main amd64 libltdl7 amd64 2.4.6-2 [38.8 kB]
Get:6 https://download.docker.com/linux/ubuntu bionic/stable amd64 docker-ce-cli amd64 5:19.03.8-3-0-ubuntu-bionic [42.6 MB]
Get:7 https://download.docker.com/linux/ubuntu bionic/stable amd64 docker-ce amd64 5:19.03.8-3-0-ubuntu-bionic [22.9 MB]
Fetched 85.8 MB in 2s (53.0 MB/s)
Selecting previously unselected package pigz.
(Reading database... 60021 files and directories currently installed.)
Preparing to unpack .../0-pigz_2.4-1_amd64.deb ...
Unpacking pigz (2.4-1) ...
Selecting previously unselected package aufs-tools.
Preparing to unpack .../1-aufs-tools_1k3a4.9+20170918-1ubuntu1_amd64.deb ...
Unpacking aufs-tools (1:4.9+20170918-1ubuntu1) ...
Selecting previously unselected package cgroupfs-mount.
Preparing to unpack .../2-cgroupfs-mount_1.4_all.deb ...
Unpacking cgroupfs-mount (1.4) ...
Selecting previously unselected package containerd.io.
Preparing to unpack .../3-containerd.io_1.2.13-1_amd64.deb ...
Unpacking containerd.io (1.2.13-1) ...
Selecting previously unselected package docker-ce-cli.
Preparing to unpack .../4-docker-ce-cli_5k3a19.03.8-3-0-ubuntu-bionic_amd64.deb ...
Unpacking docker-ce-cli (5:19.03.8-3-0-ubuntu-bionic) ...
Selecting previously unselected package docker-ce.
Preparing to unpack .../5-docker-ce_5k3a19.03.8-3-0-ubuntu-bionic_amd64.deb ...
Unpacking docker-ce (5:19.03.8-3-0-ubuntu-bionic) ...
Selecting previously unselected package libltdl7:amd64.
Preparing to unpack .../6-libltdl7_2.4.6-2_amd64.deb ...
Unpacking libltdl7:amd64 (2.4.6-2) ...
Setting up aufs-tools (1:4.9+20170918-1ubuntu1) ...
Setting up containerd.io (1.2.13-1) ...
```

```
root@prueba:~#
Setting up docker-ce (5:19.03.8-3-0-ubuntu-bionic) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /lib/systemd/system/docker.socket.
Processing triggers for libc-bin (2.27-3ubuntu1) ...
Processing triggers for systemd (237-3ubuntu10.31) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
root@prueba:~# sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2020-03-20 17:16:56 UTC; 2min 25s ago
     Docs: https://docs.docker.com
    Main PID: 14376 (dockerd)
      Tasks: 8
     CGroup: /system.slice/docker.service
             └─14376 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Mar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.890169290Z" level=warning msg="Your kernel Mar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.890538366Z" level=warning msg="Your kernel
Mar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.890662515Z" level=warning msg="Your kernel Mar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.890991980Z" level=info msg="Loading conMar 20
Mar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.038223052Z" level=info msg="Default briMar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.112988619Z" level=info msg="Loading conMar 20 17
Mar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.137707843Z" level=info msg="Docker daeMar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.138659455Z" level=info msg="Daemon has
Mar 20 17:16:56 prueba dockerd[14376]: time="2020-03-20T17:16:56.193033712Z" level=info msg="API listen
lines 1-19/19 (END)
root@prueba:~# docker ps
CONTAINER ID        IMAGE               COMMAND                  CREATED             STATUS              PORTS              NAMES
root@prueba:~#
```

Instalación de docker compose

-Sistema operativo:

Ubuntu 18.04

```
root@prueba:~# clear
root@prueba:~# sudo curl -L https://github.com/docker/compose/releases/download/1.21.2/docker-compose -o /usr/local/bin/docker-compose
% Total % Received % Xferd Average Speed Time Time Time Current
100 617 100 617 0 0 11218 0 --:--:-- --:--:-- --:--:-- 11218
100 48.3M 100 48.3M 0 0 48.6M 0 --:--:-- --:--:-- --:--:-- 48.6M
root@prueba:~# sudo chmod +x /usr/local/bin/docker-compose
root@prueba:~# docker-compose --version
docker-compose version 1.21.2, build a33471
root@prueba:~#
```

Clonar el repositorio

```
root@prueba:~/nuevoInicio
Untracked files:
(use "git add <file>..." to include in what will be committed)

.bashrc
.cache/
.cloud-locale-test.skip
.profile
.ssh/
nuevoInicio/

nothing added to commit but untracked files present (use "git add" to track)
root@prueba:~# ls
nuevoInicio
root@prueba:~# cd nuevoInicio
root@prueba:~/nuevoInicio# ls
dev docker-compose.yml miweb
root@prueba:~/nuevoInicio# cat docker-compose.yml
version: '3'
services:
  db:
    image: mariadb
    volumes:
      - "/dev/data/db:/var/lib/mysql"
    ports:
      - "4502:3306"
    environment:
      MYSQL_ROOT_PASSWORD: secreto
      MYSQL_DATABASE: dbEjemplo
      MYSQL_USER: root
      MYSQL_PASSWORD: secreto
  apache:
    image: webdevops/php-apache-dev:alpine-3-php7
    depends_on:
      - db
    volumes:
      - "/web"
    ports:
      - "80:80"
    environment:
      WEB_DOCUMENT_ROOT: /webroot@prueba:~/nuevoInicio#
root@prueba:~/nuevoInicio#
root@prueba:~/nuevoInicio# clear
root@prueba:~/nuevoInicio# docker-compose up
Creating network "nuevoInicio_default" with the default driver
Pulling db (mariadb):...
latest: Pulling from library/mariadb
423ae2b273f4: Pull complete
83bce3af0: Pull complete
de83a2304fa1: Pull complete
b6b53be908de: Pull complete
f9a
2b41ae
```

Levantar el contenedor

-Comando:

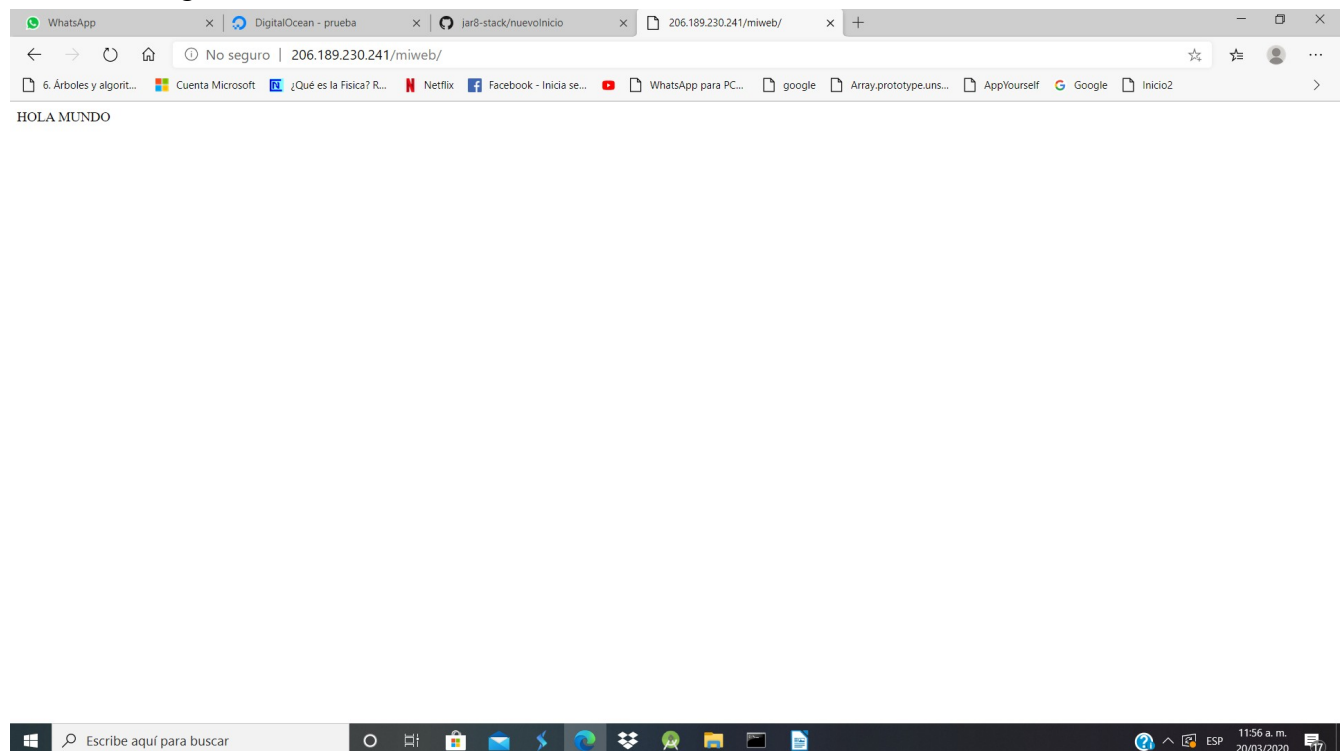
docker-compose up

```
root@prueba: ~/nuevoInicio
root@prueba:~/nuevoInicio# clear
root@prueba:~/nuevoInicio# docker-compose up
Creating network "nuevoInicio.default" with the default driver
Pulling db (mariadb:...)
latest: Pulling from library/mariadb
423ae2b273f4: Pull complete
83bce3af0: Pull complete
57cefb: Pull complete
583: Pull complete
: Pull complete
ull complete
complete
944c90ee3b596266de1b0ac25d2f34adbe9c35156b75bcb9a7047c7545
Status: Downloaded newer image for mariadb:latest
Pulling apache (webdevops/php-apache-dev:alpine-3-php7)...
alpine-3-php7: Pulling from webdevops/php-apache-dev
819300c8a437: Pull complete
46d5c81b8: Pull complete
1da990: Pull complete
34b: Pull complete
: Pull complete
ull complete
complete
Status: Downloaded newer image for webdevops/php-apache-dev:alpine-3-php7
Creating nuevoInicio_db_1 ... done
Creating nuevoInicio_apache_1 ... done
Attaching to nuevoInicio_db_1, nuevoInicio_apache_1
db_1 | 2020-03-20 17:53:35+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 1:10.4.12-maria-bionic started.
db_1 | 2020-03-20 17:53:36+00:00 [Note] [Entrypoint]: Switching to dedicated user 'mysql'
db_1 | 2020-03-20 17:53:36+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 1:10.4.12-maria-bionic started.
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/05-permissions.sh
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/10-php-debugger.sh
apache_1 | PHP-Debugger: not specified - default is xdebug
apache_1 | - Removing PHP module blackfire
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/20-php-fpm.sh
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/20-php.sh
apache_1 | -> Executing /opt/docker/bin/service.d/supervisor.d/10-init.sh
db_1 | 2020-03-20 17:53:37 0 [Note] mysqld (mysqld 10.4.12-MariaDB-1:10.4.12-maria-bionic) starting as process 1 ...
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Using Linux native AIO
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Mutexes and rw_locks use GCC atomic builtins
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Uses event mutexes
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Compressed tables use zlib 1.2.11
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Number of pools: 1
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Using SSE2 crc32 instructions
db_1 | 2020-03-20 17:53:37 0 [Note] mysqld: O_TMPFILE is not supported on /tmp (disabling future attempts)
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Initializing buffer pool, total size = 256M, instances = 1, chunk size = 128M
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Completed initialization of buffer pool
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: If the mysqld execution user is authorized, page cleaner thread priority can be changed. See the man page of setpriority().
db_1 | 2020-03-20 17:53:37 0 [Note] InnoDB: Starting crash recovery from checkpoint LSN=60990
apache_1 | 2020-03-20 17:53:37,560 CRIT Set uid to user 0
```

Acceder a nuestro contenedor vía un explorador de internet

Navegador:

Microsoft Edge



Acceder a nuestra BD via WorkBench, Sequel Pro, heidisql

-Gestor de base de datos:

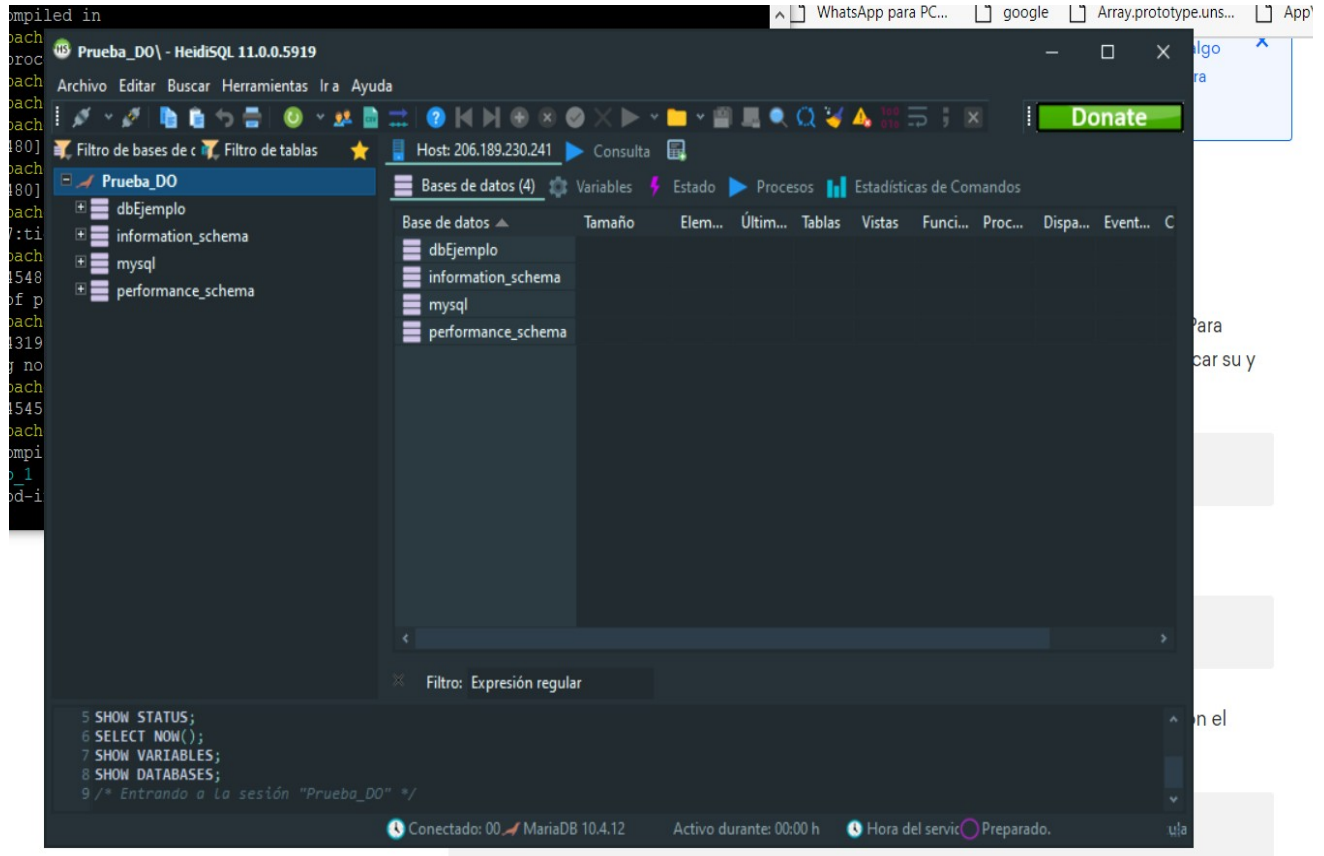
HeidiSQL

-Base de datos:

MariaDB

-Puerto:

4502



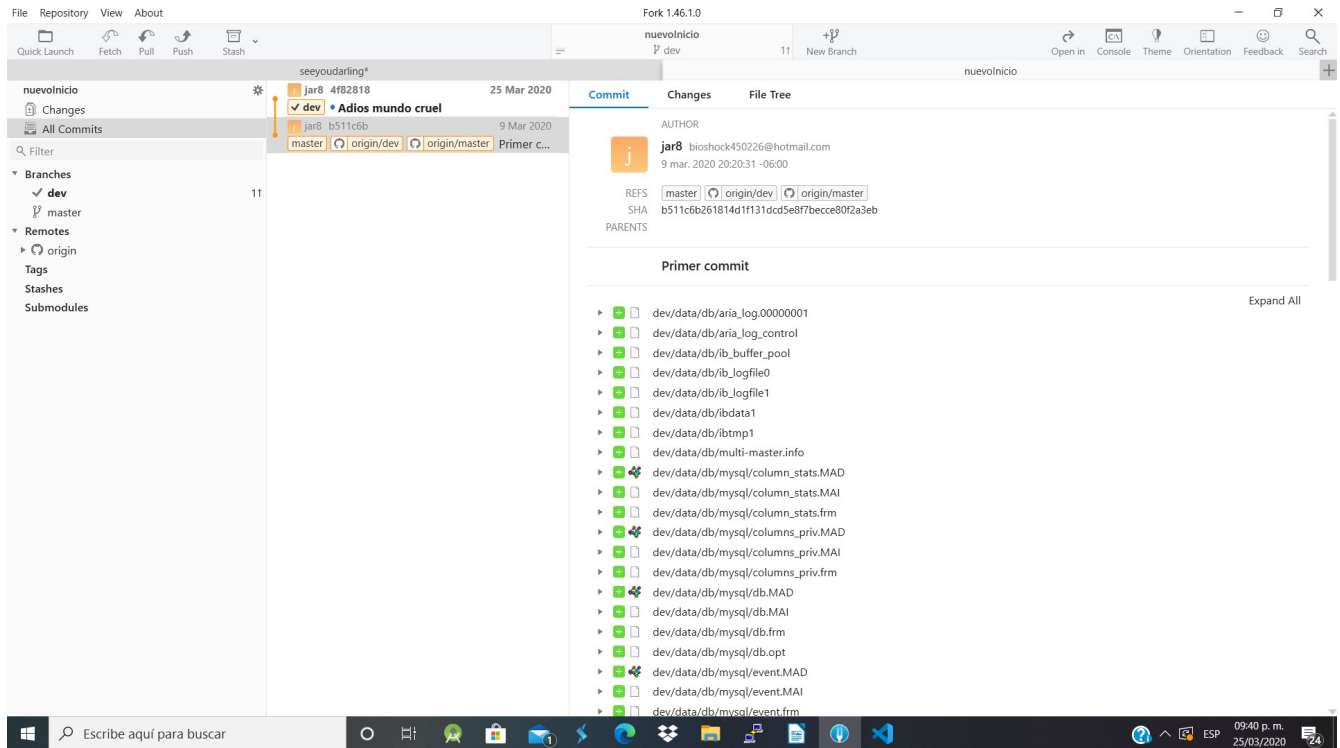
Realizar un Update al Repo y hacer un Push

-Software de consulta para github:

Fork

-Rama de consultas en github:

dev



Deploy

-Navegador:

Microsoft Edge

