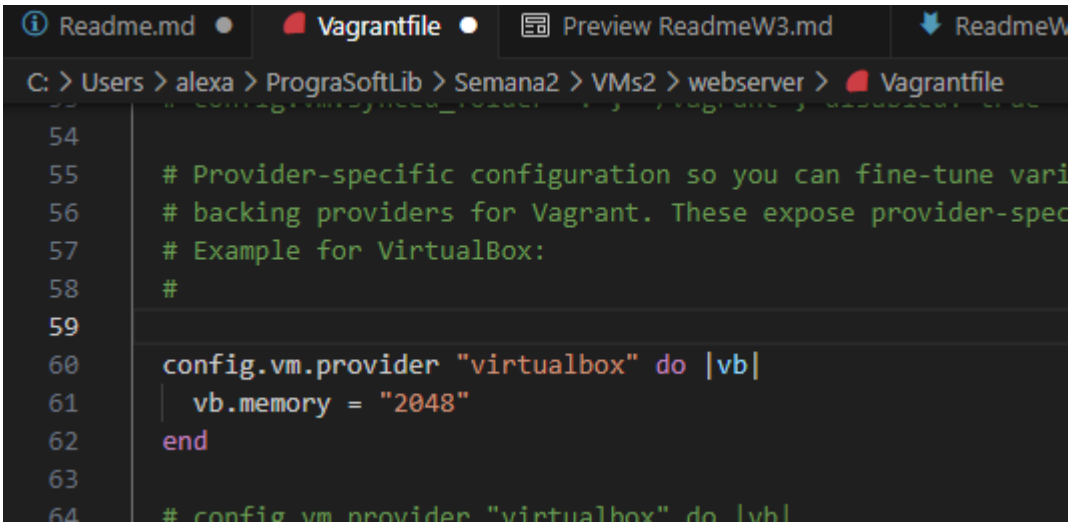
# Workshop 4 - XXXX

## Agregar memoria suficiente a la VM

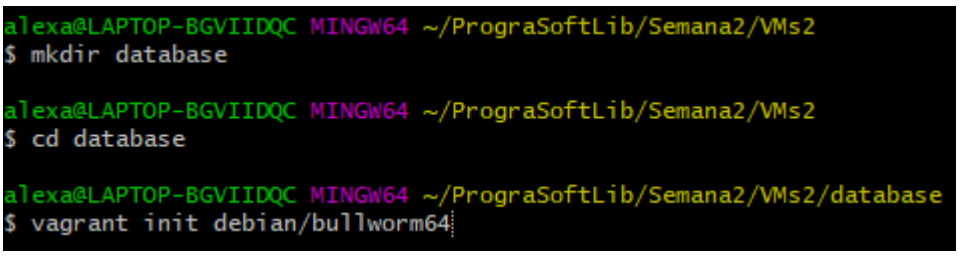
```
config.vm.provider "virtualbox" do |vb|
     vb.memory = "2048"
  end
```



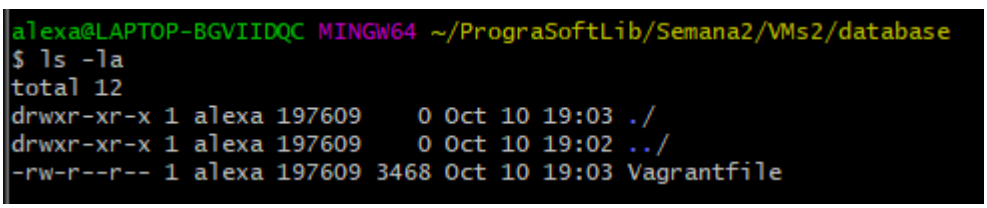

Reiniciar la VM despues de aplicar este cambio al Vagrantfile

## Crear una segunda VM

```
mkdir database
cd database
$ vagrant init debian/bullworm64
```




## Verificamos los archivos de la carpeta DB para validar que cuente con el vagrantfile

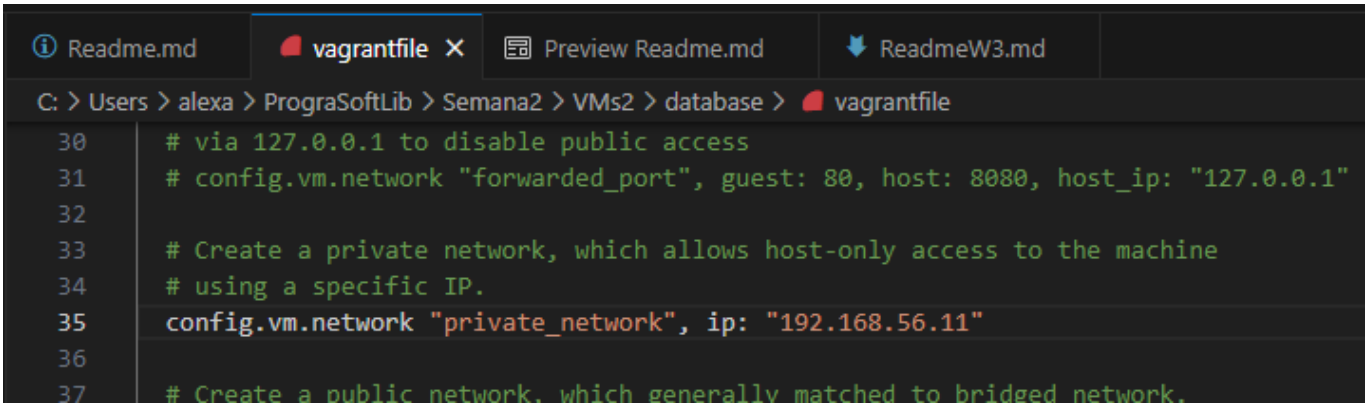


```
ls -ls
```

## Abrir el vagrantfile para configurar la IP

```
alexa@LAPTOP-BGVIIDQC MINGW64 ~/PrograSoftLib/Semana2/VMs2/database
$ code vagrantfile
```

```
code vagrantfile
```




## Iniciar la nueva VM

```
vagrant up
vagrant ssh
```

```
alexa@LAPTOP-BGVIIDQC MINGW64 ~/PrograSoftLib/Semana2/VMs2/database
$ vagrant ssh
Linux bookworm 6.1.0-10-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.38-1 (2023-07-14) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
vagrant@bookworm:~$
```

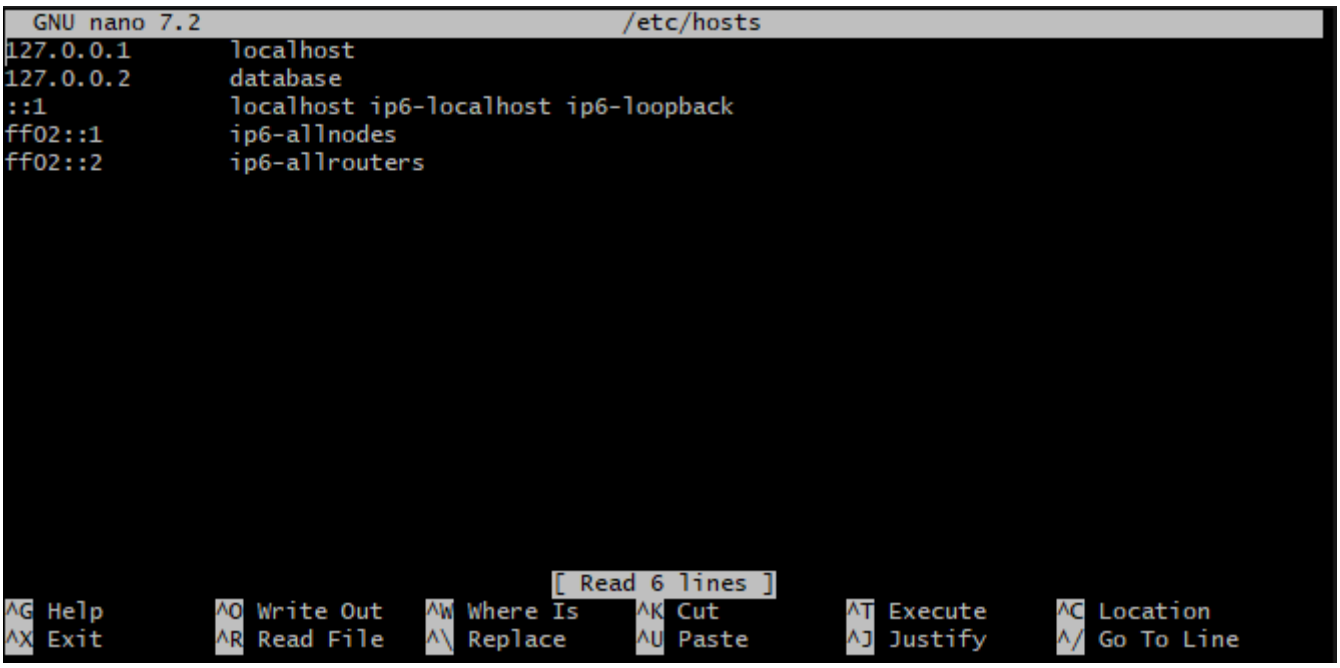
## Modificar el nombre de la VM

```
sudo hostnamectl set-hostname database
```

```
permitted by applicable law.
vagrant@bookworm:~$ sudo hostnamectl set-hostname database
vagrant@bookworm:~$
```

## Corregir la entrada que del archivo host para que coincida con el nuevo nombre del host

```
sudo nano /etc/hosts
```




## Para verificar el nuevo cambio salimos y volvemos a conectar

```
exit
vagrant ssh
```

## Instalar los paquetes de MariaDB para que la maquina sirva como BD

```
sudo apt-get update
```

```
vagrant@database:~$ sudo apt-get update
Get:1 https://security.debian.org/debian-security bookworm-security InRelease [48.0 kB]
Get:2 https://deb.debian.org/debian bookworm InRelease [151 kB]
Get:3 https://deb.debian.org/debian bookworm-updates InRelease [52.1 kB]
Get:4 https://security.debian.org/debian-security bookworm-security/main Sources [47.6 kB]
Get:5 https://security.debian.org/debian-security bookworm-security/main amd64 Packages [79.4
kB]
Get:6 https://deb.debian.org/debian bookworm-backports InRelease [56.5 kB]
Get:7 https://security.debian.org/debian-security bookworm-security/main Translation-en [45.9
kB]
Get:8 https://deb.debian.org/debian bookworm/main Sources [9488 kB]
Get:9 https://deb.debian.org/debian bookworm/main amd64 Packages [8780 kB]
Get:10 https://deb.debian.org/debian bookworm/main Translation-en [6110 kB]
Get:11 https://deb.debian.org/debian bookworm-updates/main Sources [2324 B]
Get:12 https://deb.debian.org/debian bookworm-updates/main amd64 Packages [6408 B]
Get:13 https://deb.debian.org/debian bookworm-updates/main Translation-en [5008 B]
Get:14 https://deb.debian.org/debian bookworm-backports/main Sources [109 kB]
Get:15 https://deb.debian.org/debian bookworm-backports/main amd64 Packages [113 kB]
Get:16 https://deb.debian.org/debian bookworm-backports/main Translation-en [90.9 kB]
Fetched 25.2 MB in 6s (4154 kB/s)
Reading package lists... Done
```

```
sudo apt-get install mariadb-server mariadb-client
```


```
vagrant@database:~$ sudo apt-get update
Get:1 https://security.debian.org/debian-security bookworm-security InRelease [48.0 kB]
Get:2 https://deb.debian.org/debian bookworm InRelease [151 kB]
Get:3 https://deb.debian.org/debian bookworm-updates InRelease [52.1 kB]
Get:4 https://security.debian.org/debian-security bookworm-security/main Sources [47.6 kB]
Get:5 https://security.debian.org/debian-security bookworm-security/main amd64 Packages [79.4
kB]
Get:6 https://deb.debian.org/debian bookworm-backports InRelease [56.5 kB]
Get:7 https://security.debian.org/debian-security bookworm-security/main Translation-en [45.9
kB]
Get:8 https://deb.debian.org/debian bookworm/main Sources [9488 kB]
Get:9 https://deb.debian.org/debian bookworm/main amd64 Packages [8780 kB]
Get:10 https://deb.debian.org/debian bookworm/main Translation-en [6110 kB]
Get:11 https://deb.debian.org/debian bookworm-updates/main Sources [2324 B]
Get:12 https://deb.debian.org/debian bookworm-updates/main amd64 Packages [6408 B]
Get:13 https://deb.debian.org/debian bookworm-updates/main Translation-en [5008 B]
Get:14 https://deb.debian.org/debian bookworm-backports/main Sources [109 kB]
Get:15 https://deb.debian.org/debian bookworm-backports/main amd64 Packages [113 kB]
Get:16 https://deb.debian.org/debian bookworm-backports/main Translation-en [90.9 kB]
Fetched 25.2 MB in 6s (4154 kB/s)
```


## Eliminar las funciones de servidor de la BD de la maquina webserver

Debemos salir de database e ingresar a webserver para levantar ahi la VM y correr el comando

```
alexa@LAPTOP-BGVIIDQC MINGW64 ~/PrograSoftLib/Semana2/VMs2/database
$ cd ..

alexa@LAPTOP-BGVIIDQC MINGW64 ~/PrograSoftLib/Semana2/VMs2
$ cd webserver

alexa@LAPTOP-BGVIIDQC MINGW64 ~/PrograSoftLib/Semana2/VMs2/webserver
$ vagrant ssh
Linux webserver 6.1.0-12-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.52-1 (2023-09-07) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Oct 11 00:55:54 2023 from 10.0.2.2
vagrant@webserver:~$ sudo apt-get remove mariadb-server mariadb-client
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  galera-4 libcgi-fast-perl libcgi-pm-perl libclone-perl libconfig-inifiles-perl libdaxctl1
```

```
sudo apt-get remove mariadb-server mariadb-client
```

```
vagrant@webserver:~$ sudo apt-get remove mariadb-server mariadb-client
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  galera-4 libcgi-fast-perl libcgi-pm-perl libclone-perl libconfig-inifiles-perl libdaxctl1
  libdbd-mariadb-perl libdbi-perl libencode-locale-perl libfcgi-bin libfcgi-perl
  libfcgi0ldbl libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
  libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl liblzo2-2
  libmariadb3 libndctl6 libpmem1 libregexp-ipv6-perl libsnappy1v5 libterm-readkey-perl
  libtimedate-perl liburi-perl mariadb-client-core mariadb-common mariadb-server-core
  mysql-common pv rsync socat
Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
  mariadb-client mariadb-plugin-provider-bzip2 mariadb-plugin-provider-lz4
  mariadb-plugin-provider-lzma mariadb-plugin-provider-lzo mariadb-plugin-provider-snappy
  mariadb-server
0 upgraded, 0 newly installed, 7 to remove and 0 not upgraded.
After this operation, 120 MB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 38139 files and directories currently installed.)
```

## Crear un usuario y una BD para utilizar en el desarrollo del curso LFTS

Ingresar y levantar database

```
alexa@LAPTOP-BGVIIDQC MINGW64 ~/PrograSoftLib/Semana2/VMs2/database
$ vagrant ssh
Linux database 6.1.0-10-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.38-1 (2023-07-14) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Oct 11 01:20:20 2023 from 10.0.2.2
vagrant@database:~$
```

Dentro de database corremos sudo mysql

```
vagrant@database:~$ sudo mysql
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 31
Server version: 10.11.4-MariaDB-1~deb12u1 Debian 12

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

## Creacion de las credenciales de la BD

```
create user laravel identified by 'seceret';
create database lfts;
grant all privileges on lfts.* to laravel;
flush privileges;
quit
```

```
MariaDB [(none)]> create user laravel identified by 'seceret';
Query OK, 0 rows affected (0.006 sec)

MariaDB [(none)]> create database lfts;
Query OK, 1 row affected (0.007 sec)

MariaDB [(none)]> grant all privileges on lfts.* to laravel;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]>
```

```
vagrant@database:~$ ls -la
total 28
drwxr-xr-x 3 vagrant vagrant 4096 Oct 11 01:20 .
drwxr-xr-x 3 root    root    4096 Jul 23 09:05 ..
-rw------- 1 vagrant vagrant  141 Oct 11 01:25 .bash_history
-rw-r--r-- 1 vagrant vagrant  220 Apr 23 21:23 .bash_logout
-rw-r--r-- 1 vagrant vagrant 3526 Apr 23 21:23 .bashrc
-rw-r--r-- 1 vagrant vagrant  807 Apr 23 21:23 .profile
drwx------ 2 vagrant vagrant 4096 Oct 11 01:15 .ssh
vagrant@database:~$
```

## Comprobar que hicimos el password y el grant correctamente

```
mysql -u laravel -p;
```

```
vagrant@database:~$ mysql -u laravel -p;
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 35
Server version: 10.11.4-MariaDB-1~deb12u1 Debian 12

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

```
show databases;
```

```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| lfts               |
+--------------------+
2 rows in set (0.001 sec)

MariaDB [(none)]>
```

# Habilitar el acceso remoto a la BD 'MariaDB'

Para que se pueda conectar desde una maquina externa.

```
sudo nano -l /etc/mysql/mariadb.conf.d/50-server.cnf
```

```
vagrant@database:~$ sudo nano /etc/mysql/mariadb.conf.d/50-server.cnf
vagrant@database:~$
```

Comentamos la linea del bind-address y salvamos con [Ctrl+O] y salimos del editor con [Ctrl+X]

```
  GNU nano 7.2                 /etc/mysql/mariadb.conf.d/50-server.cnf *
#datadir                = /var/lib/mysql
#tmpdir                 = /tmp

# Broken reverse DNS slows down connections considerably and name resolve is
# safe to skip if there are no "host by domain name" access grants
#skip-name-resolve

# Instead of skip-networking the default is now to listen only on
# localhost which is more compatible and is not less secure.
#bind-address            = 127.0.0.1

#
# * Fine Tuning
#

#key_buffer_size        = 128M
#max_allowed_packet     = 1G
#thread_stack           = 192K
#thread_cache_size      = 8

^G Help        ^O Write Out   ^W Where Is    ^K Cut         ^T Execute     ^C Location
^X Exit        ^R Read File   ^\ Replace     ^U Paste       ^J Justify     ^/ Go To Line
```

## Reiniciamos y salimos

```
sudo systemctl restart mysql
exit
```

```
vagrant@database:~$ sudo systemctl restart mysql
vagrant@database:~$ exit
logout
There are stopped jobs.
vagrant@database:~$
```

## Comprobamos el acceso remoto a la BD desde webserver

```
mysql -h 192.168.56.11 -u laravel -p
```

```
vagrant@webserver:~$ mysql -h 192.168.56.11 -u laravel -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 31
Server version: 10.11.4-MariaDB-1~deb12u1 Debian 12

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

```
show databases;
```

```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| lfts               |
+--------------------+
2 rows in set (0.002 sec)

MariaDB [(none)]>
```

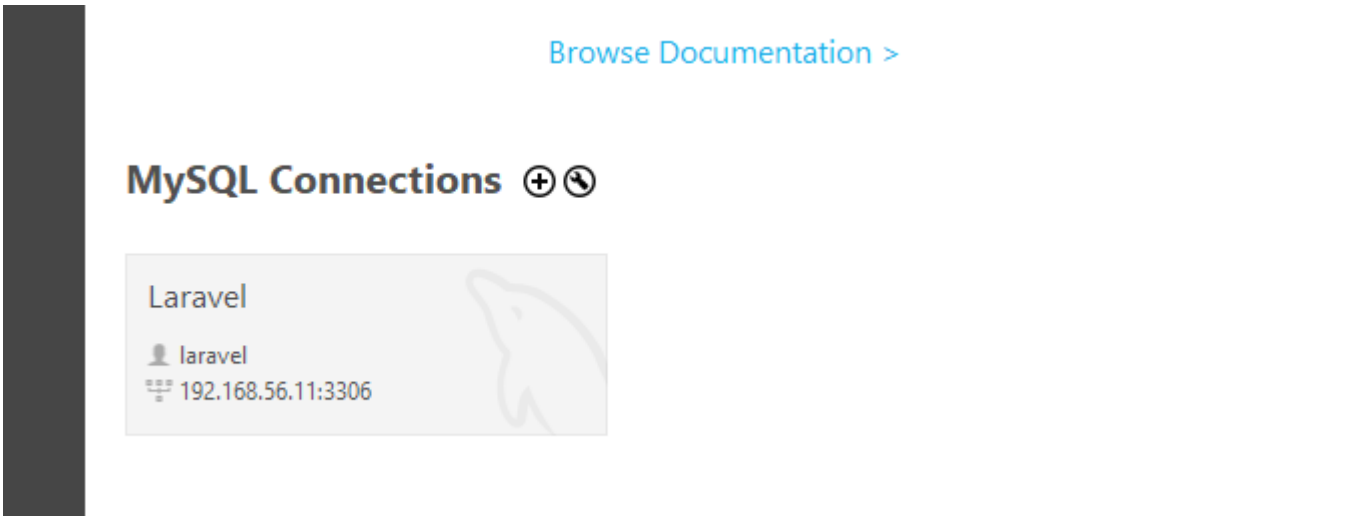
Comprobamos nuevamente que podemos ver y conectar a la BD

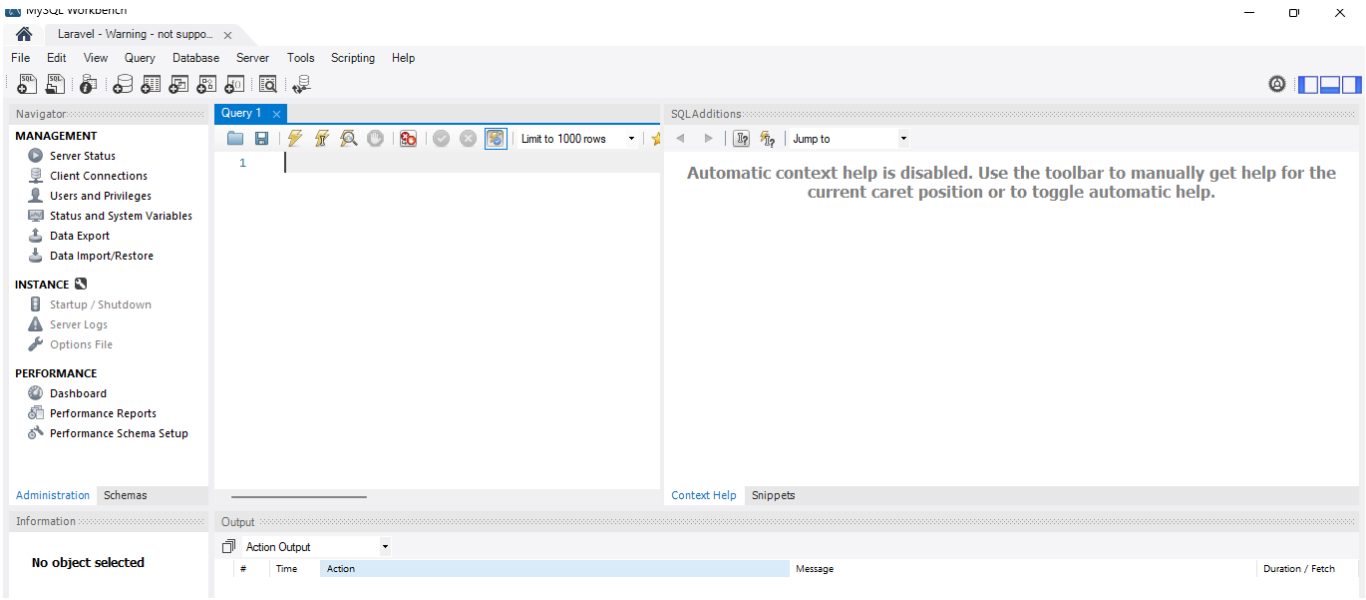
```
sudo apt-get install mariadb-client
mysql -u laravel -h 192.168.56.11 -p
```

```
vagrant@webserver:~$ mysql -u laravel -h 192.168.56.11 -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 33
Server version: 10.11.4-MariaDB-1~deb12u1 Debian 12

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

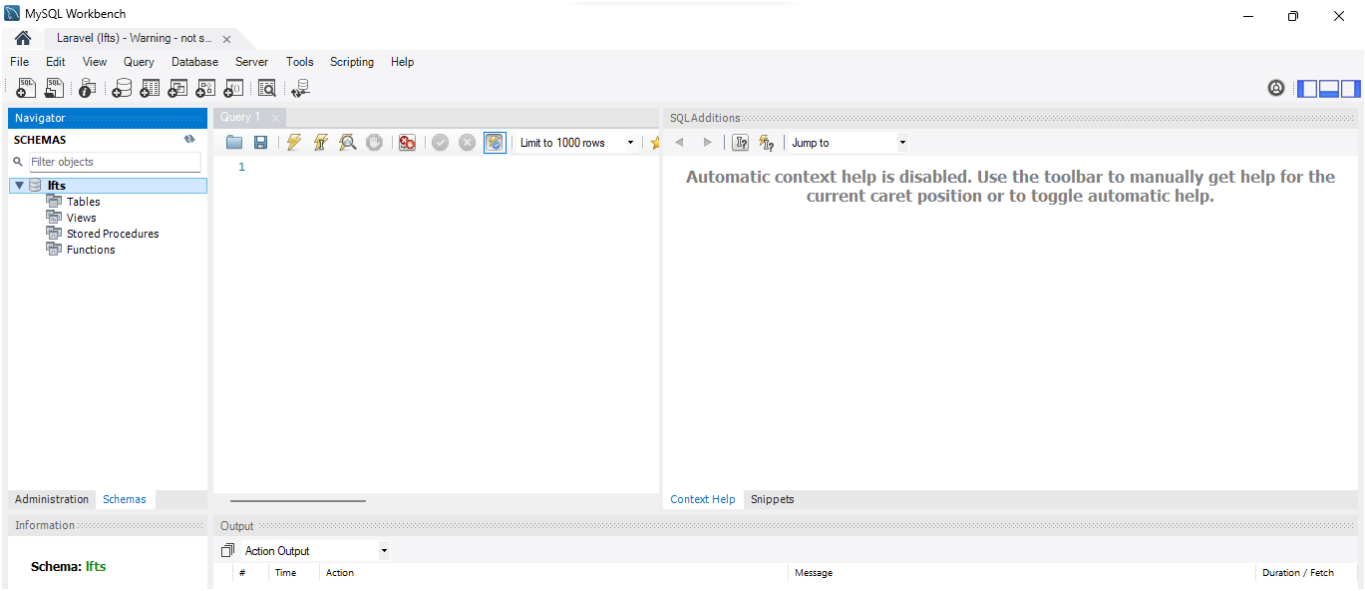
# Instalacion de workbench y crear una nueva conexion

Descargar aqui Workbench.




## Habilitamos el schema lfts para conectarnos a la BD lfts




# Habilitar autenticacion con Laravel/UI

Vamos a necesitar node y npm. Para esto vamos a instalar nvm, que es un admin de versiones para node.js.

```
curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.5/install.sh | bash
```

```
vagrant@webserver:~$ curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.5/install.sh
| bash
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 15916  100 15916    0     0  41109      0 --:--:-- --:--:-- --:--:-- 41126
=> Downloading nvm as script to '/home/vagrant/.nvm'

=> Appending nvm source string to /home/vagrant/.bashrc
=> Appending bash_completion source string to /home/vagrant/.bashrc
=> Close and reopen your terminal to start using nvm or run the following to use it now:

export NVM_DIR="$HOME/.nvm"
[ -s "$NVM_DIR/nvm.sh" ] && \. "$NVM_DIR/nvm.sh"  # This loads nvm
[ -s "$NVM_DIR/bash_completion" ] && \. "$NVM_DIR/bash_completion"  # This loads nvm bash_comp
letion
vagrant@webserver:~$
```

Salir de la mquina y volver a ingresar para probar el comando nvm

```
exit
vagrant ssh
nvm
```

```
vagrant@webserver:~$ nvm

Node Version Manager (v0.39.5)

Note: <version> refers to any version-like string nvm understands. This includes:
  - full or partial version numbers, starting with an optional "v" (0.10, v0.1.2, v1)
  - default (built-in) aliases: node, stable, unstable, iojs, system
  - custom aliases you define with `nvm alias foo`

 Any options that produce colorized output should respect the `--no-colors` option.

Usage:
  nvm --help                                  Show this message
    --no-colors                               Suppress colored output
  nvm --version                               Print out the installed version of nvm
  nvm install [<version>]                     Download and install a <version>. Uses .nvmrc if
 available and version is omitted.
   The following optional arguments, if provided, must appear directly after `nvm install`:
    -s                                        Skip binary download, install from source only.
    -b                                        Skip source download, install from binary only.
    --reinstall-packages-from=<version>       When installing, reinstall packages installed in
```

Instalar Node.js, con el siguiente comando podemos listar kas versiones disponibles de node.js, y con el comando 'nvm install --lts=hydrogen' instalamos la version estable con el nombre clave Hydrogen(Compatible con Laravel 6.8.12)

```
nvm ls-remote
```

```
vagrant@webserver:~$ nvm  ls-remote
        v0.1.14
        v0.1.15
        v0.1.16
        v0.1.17
        v0.1.18
        v0.1.19
        v0.1.20
        v0.1.21
        v0.1.22
        v0.1.23
        v0.1.24
        v0.1.25
        v0.1.26
        v0.1.27
        v0.1.28
        v0.1.29
        v0.1.30
        v0.1.31
        v0.1.32
        v0.1.33
```

```
nvm install --lts=hydrogen
```

```
v20.8.0
vagrant@webserver:~$ nvm install --lts=hydrogen
Installing with latest version of LTS line: hydrogen
Downloading and installing node v18.18.1...
Downloading https://nodejs.org/dist/v18.18.1/node-v18.18.1-linux-x64.tar.xz...
######################################################################################## 100.0%
Computing checksum with sha256sum
Checksums matched!
Now using node v18.18.1 (npm v9.8.1)
Creating default alias: default -> lts/hydrogen (-> v18.18.1)
vagrant@webserver:~$
```

# Instalar laravel UI

Primero requerimos Composer y node.js

Ingresamos a sites/lfts

```
cd /vagrant/sites/lfts.isw811.xyz/
```

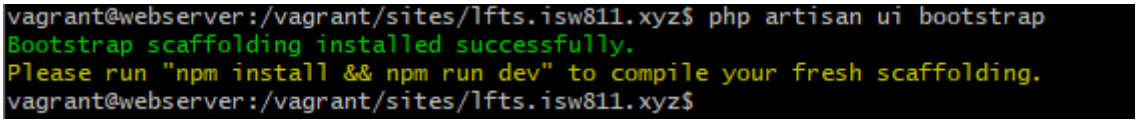
```
Creating default alias: default -> lts/hydrogen (-> v18.18
vagrant@webserver:~$ cd /vagrant/sites/lfts.isw811.xyz/
vagrant@webserver:/vagrant/sites/lfts.isw811.xyz$
```

Luego descargamos la version

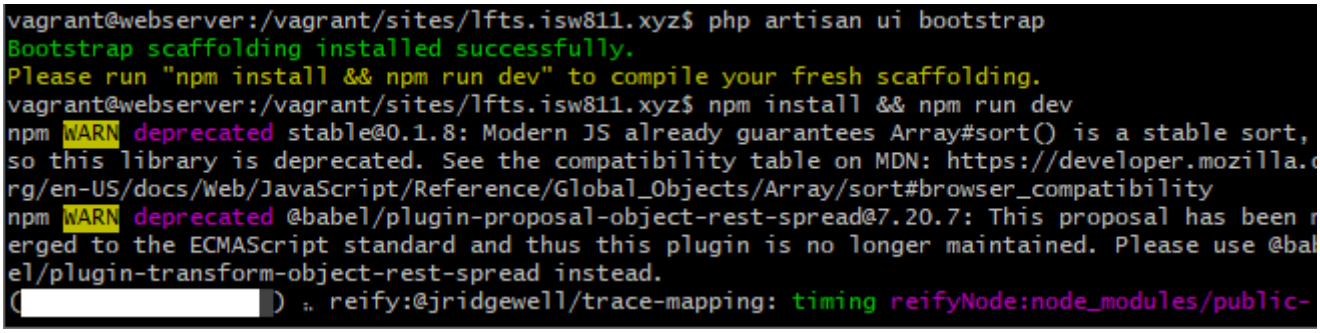
```
composer require laravel/ui:3.4.6
```

```
vagrant@webserver:/vagrant/sites/lfts.isw811.xyz$ composer require laravel/ui:3.4.6
Info from https://repo.packagist.org: #StandWithUkraine
./composer.json has been updated
Running composer update laravel/ui
Loading composer repositories with package information
Updating dependencies
Lock file operations: 1 install, 0 updates, 0 removals
  - Locking laravel/ui (v3.4.6)
Writing lock file
Installing dependencies from lock file (including require-dev)
Package operations: 1 install, 0 updates, 0 removals
  - Downloading laravel/ui (v3.4.6)
  - Installing laravel/ui (v3.4.6): Extracting archive
Package fruitcake/laravel-cors is abandoned, you should avoid using it. No replacement was sug
gested.
Package swiftmailer/swiftmailer is abandoned, you should avoid using it. Use symfony/mailer in
stead.
Generating optimized autoload files
```

```
php artisan ui bootstrap
```

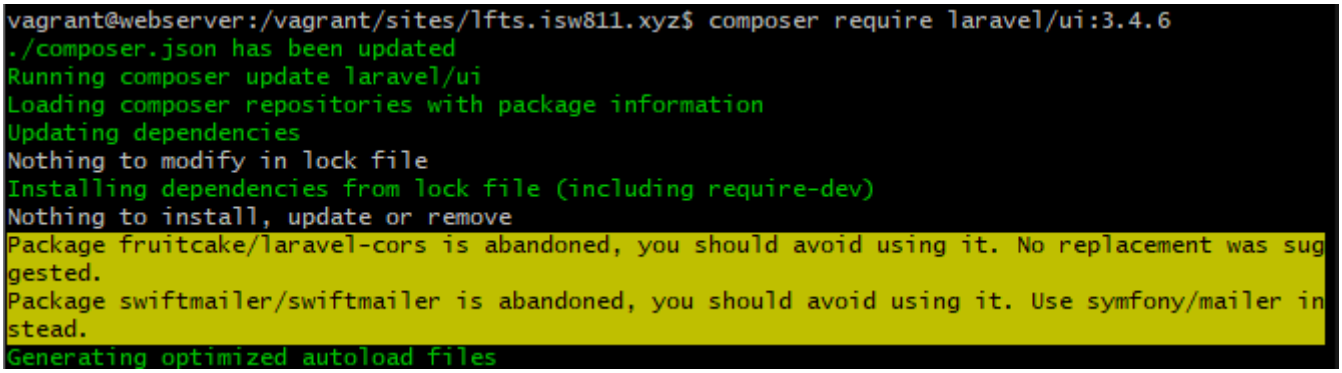



```
npm install && npm run dev
npm install && npm run dev #este comando se ejecuta dos veces
```




## Descagar las dependencias y agregarlas a nuestro package.json

```
cat package.json
```



```
vagrant@webserver:/vagrant/sites/lfts.isw811.xyz$ cat package.json
{
    "private": true,
    "scripts": {
        "dev": "npm run development",
        "development": "mix",
        "watch": "mix watch",
        "watch-poll": "mix watch -- --watch-options-poll=1000",
        "hot": "mix watch --hot",
        "prod": "npm run production",
        "production": "mix --production"
    },
    "devDependencies": {
        "axios": "^0.21",
        "laravel-mix": "^6.0.6",
        "lodash": "^4.17.19",
        "postcss": "^8.1.14"
    }
}
vagrant@webserver:/vagrant/sites/lfts.isw811.xyz$
```

## Creamos las vistas de autenticacion

Antes de correr el npm install primero debemos abrir un cmd como administrador ejecutar los siguientes comandos, uno a la vez.

```
FOR %F IN ("%SystemRoot%\servicing\Packages\Microsoft-Windows-GroupPolicy-ClientTools-Package~*.mum") DO (DISM /Online /NoRestart /Add-Package:"%F")

FOR %F IN ("%SystemRoot%\servicing\Packages\Microsoft-Windows-GroupPolicy-ClientExtensions-Package~*.mum") DO (DISM /Online /NoRestart /Add-Package:"%F")
```

# How to Enable the GPEdit.msc on Windows 10 and 11 Home?

I`ve recently had to search for this informtion and thought I would share the answer. Sorce - Enable Group Policy Editor (gpedit.msc) on Windows 10/11 Home Edition | Windows OS Hub (woshub.com) "It is likely that, according to the Microsoft logic, the home user doesn't need to edit the local settings through the gpedit.msc GUI. Accordingly, users of the Windows 10 home editions have to make changes through the registry editor `regedit.exe`, which is not so clear and more risky since it is possible to make a mistake and break the system.
Fortunately, Windows 10 Home has the undocumented option to install the gpedit.msc editor from the Windows image packages and manifests repository (`\Windows\servicing\packages`).
How to Enable the GPEdit.msc on Windows 10 and 11 Home?
To install the Local Group Policy Editor in Windows 10 Home edition, open a command prompt as administrator and run two one-line commands in sequence:

```
FOR %F IN ("%SystemRoot%\servicing\Packages\Microsoft-Windows-GroupPolicy-ClientTools-Package~*.mum")
DO (DISM /Online /NoRestart /Add-Package:"%F")
FOR %F IN ("%SystemRoot%\servicing\Packages\Microsoft-Windows-GroupPolicy-ClientExtensions-
Package~*.mum") DO (DISM /Online /NoRestart /Add-Package:"%F")
```

En mi caso no sirvem entonces debo levantar la vm de webserve desde un cmd como administrador

Ahora si podemos realizar la instalacion

```
php artisan ui bootstrap
npm install && npm run dev
```

## Modificar el archivo .env de la raiz de lfts

```
vim .env
```

## Se debe craftear la BD desde el proyecto

Nos conectamos desde vagrant ssh

```
vagrant ssh
php artisan migrate
```

# Iniciar curso de laravel en la seccion 2

Comandos para documentar avances en git

```
git init -> Para iniciar el git
git log
ls .gitignore
git add .
git commit -m "Mi primer commit" -> Para iniciar el primer commit
git status -> para ver los cambios
git push -u laravel main
```

Omitir capetas vendor, estar ubicados en git

```
mkdir docs
code README.md -> Crear aqui el registro del avance en el curso, crear un nuevo
archivo .md por cada modulo
```