PARTE 1:

1. Actualizar el Sistema

```
root@ubuntu:/home/ubuntu# sudo apt update
Ign:1 cdrom://Ubuntu 24.04.3 LTS _Noble Numbat_ - Release amd64 (202
50805.1) noble InRelease
Hit:2 cdrom://Ubuntu 24.04.3 LTS Noble Numbat - Release amd64 (202
50805.1) noble Release
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [12]
5 kB1
Hit:4 http://archive.ubuntu.com/ubuntu noble InRelease
Get:5 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126
Get:7 http://archive.ubuntu.com/ubuntu noble-backports InRelease [12
5 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main i386 Pac
kages [339 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main amd64 Pa
ckages [1,222 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main Transla
tion-en [204 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Pac
kages [1,498 kB]
Get:12 http://security.ubuntu.com/ubuntu noble-security/main amd64 C
omponents [21.5 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/main amd64 c
-n-f Metadata [8,968 B]
Get:14 http://security.ubuntu.com/ubuntu noble-security/universe i38
 oot@juan-VirtualBox:/home/juan# sudo apt upgrade -y
```

```
root@juan-VirtualBox:/home/juan# sudo apt upgrade -y
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
Calculando la actualización... Hecho
El paquete indicado a continuación se instaló de forma automática y ya no es necesario.
libllvm19
Utilice «sudo apt autoremove» para eliminarlo.
Se instalarán los siguientes paquetes NUEVOS:
libllvm20
The following upgrades have been deferred due to phasing:
bluez bluez-cups bluez-obexd libbluetooth3
Se actualizarán los siguientes paquetes:
bind9-dnsutils bind9-host bind9-libs cloud-init coreutils dconf-cli dconf-gsettings-backend dconf-service fwupd gdm3
gir1.2-gdm-1.0 gir1.2-gtk-4.0 gir1.2-nm-1.0 gnome-shell-extension-desktop-icons-ng libdconf1 libegl-mesa0 libfwupd2
libgbm1 libgdm1 libgl1-mesa-dri libglx-mesa0 libgtk-4-1 libgtk-4-bin libgtk-4-common libgtk-4-media-gstreamer
```

2.Instalar apache2

```
Enabling module authz host.
Enabling module authn core.
Enabling module auth basic.
Enabling module access compat.
Enabling module authn file.
Enabling module authz user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module regtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/
Created symlink /etc/systemd/system/multi-user.target.wants/
-htcacheclean.service.
Procesando disparadores para ufw (0.36.2-6) ...
Procesando disparadores para man-db (2.12.0-4build2) ...
Procesando disparadores para libc-bin (2.39-0ubuntu8.6) ...
  oot@juan-VirtualBox:/home/juan# sudo systemctl status apache2
apache2.service - The Apache HTTP Server
Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
    Active: active (running) since Fri 2025-10-17 10:44:12 CEST; 1min 51s ago Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 14657 (apache2)
Tasks: 55 (limit: 4603)
    Memory: 5.4M (peak: 6.1M)
      CPU: 57ms
    CGroup: /system.slice/apache2.service
           —14657 /usr/sbin/apache2 -k start
—14659 /usr/sbin/apache2 -k start
           oct 17 10:44:12 juan-VirtualBox systemd[1]: Starting apache2.service - The Apache HTTP Server...
oct 17 10:44:12 juan-VirtualBox apachectl[14656]: AH00558: apache2: Could not reliably determine the server's fully qua
oct 17 10:44:12 juan-VirtualBox systemd[1]: Started apache2.service - The Apache HTTP Server.
```

```
root@juan-VirtualBox:/home/juan# sudo apt install mysql-server -y
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
El paquete indicado a continuación se instaló de forma automática y ya no es necesario.
  libllvm19
Utilice «sudo apt autoremove» para eliminarlo.
Se instalarán los siguientes paquetes adicionales:
  libaio1t64 libcgi-fast-perl libcgi-pm-perl libevent-core-2.1-7t64 libevent-pthreads-2.1-7t64 libfcgi-bin
  libfcgi-perl libfcgi0t64 libhtml-template-perl libmecab2 libprotobuf-lite32t64 mecab-ipadic mecab-ipadic-utf8
  mecab-utils mysql-client-8.0 mysql-client-core-8.0 mysql-common mysql-server-8.0 mysql-server-core-8.0
Paquetes sugeridos:
  libipc-sharedcache-perl mailx tinyca
Se instalarán los siguientes paquetes NUEVOS:
  libaio1t64 libcgi-fast-perl libcgi-pm-perl libevent-core-2.1-7t64 libevent-pthreads-2.1-7t64 libfcgi-bin
libfcgi-perl libfcgi0t64 libhtml-template-perl libmecab2 libprotobuf-lite32t64 mecab-ipadic mecab-ipadic-utf8
  mecab-utils mysql-client-8.0 mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
0 actualizados, 20 nuevos se instalarán, 0 para eliminar y 4 no actualizados.
Se necesita descargar 29,3 MB de archivos.
Se utilizarán 242 MB de espacio de disco adicional después de esta operación.

Des:1 http://es.archive.ubuntu.com/ubuntu noble/main amd64 mysql-common all 5.8+1.1.0build1 [6.746 B]
Des:2 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 mysql-client-core-8.0 amd64 8.0.43-0ubuntu0.24.04.2 [
root@juan-VirtualBox:/home/juan# sudo mysql_secure_installation
Securing the MySQL server deployment.
Connecting to MySQL using a blank password.
VALIDATE PASSWORD COMPONENT can be used to test passwords
and improve security. It checks the strength of password
and allows the users to set only those passwords which are
secure enough. Would you like to setup VALIDATE PASSWORD component?
Press vIY for Yes, any other key for No: N
Skipping password set for root as authentication with auth_socket is used by default.
If you would like to use password authentication instead, this can be done with the "ALTER_USER" command.
See https://dev.mysql.com/doc/refman/8.0/en/alter-user.html#alter-user-password-management for more information.
```

4.Instalar PHP

```
oot@iuan-VirtualBox:/home/juan# sudo apt install php php-mysgl libapache2-mod-php php-curl php-gd php-mbstring php-xml
php-xmlrpc php-intl php-zip -y
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
El paquete indicado a continuación se instaló de forma automática y ya no es necesario.
Utilice «sudo apt autoremove» para eliminarlo.
Se instalarán los siguientes paquetes adicionales:
libapache2-mod-php8.3 libsodium23 libxmlrpc-epi0t64 libzip4t64 php-common php8.3 php8.3-cli php8.3-common
  php8.3-curl php8.3-gd php8.3-intl php8.3-mbstring php8.3-mysql php8.3-opcache php8.3-readline php8.3-xml
php8.3-xmlrpc php8.3-zip
Paquetes sugeridos:
  php-pear
Se instalarán los siguientes paquetes NUEVOS:
  libapache2-mod-php libapache2-mod-php8.3 libsodium23 libxmlrpc-epi0t64 libzip4t64 php php-common php-curl php-gd
php-intl php-mbstring php-mysql php-xml php-xmlrpc php-zip php8.3-php8.3-cli php8.3-common php8.3-curl php8.3-gd php8.3-intl php8.3-mbstring php8.3-mysql php8.3-opcache php8.3-readline php8.3-xml php8.3-xmlrpc php8.3-zip 0 actualizados, 28 nuevos se instalarán, 0 para eliminar y 4 no actualizados.
Se necesita descargar 6.223 kB de archivos.
Se utilizarán 26,5 MB de espacio de disco adicional después de esta operación.
Des:1 http://es.archive.ubuntu.com/ubuntu noble/main amd64 php-common all 2:93ubuntu2 [13,9 kB]
Des:2 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-common amd64 8.3.6-0ubuntu0.24.04.5 [740 kB]
Des:3 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-opcache amd64 8.3.6-0ubuntu0.24.04.5 [371 kB]
Des:4 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-readline amd64 8.3.6-0ubuntu0.24.04.5 [13,5 kB]
Des:5 http://es.archive.ubuntu.com/ubuntu noble/main amd64 libsodium23 amd64 1.0.18-1build3 [161 kB]
Des:6 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-cli amd64 8.3.6-0ubuntu0.24.04.5 [1.915 kB]
Des:7 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 libapache2-mod-php8.3 amd64 8.3.6-0ubuntu0.24.04.5 [1
.851 kB]
Des:8 http://es.archive.ubuntu.com/ubuntu noble/universe amd64 libxmlrpc-epi0t64 amd64 0.54.2-2.1build1 [30,9 kB]
```

```
root@juan-VirtualBox:/home/juan# php -v
PHP 8.3.6 (cli) (built: Jul 14 2025 18:30:55) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.3.6, Copyright (c) Zend Technologies
with Zend OPcache v8.3.6, Copyright (c), by Zend Technologies
root@juan-VirtualBox:/home/juan#
```

root@juan-VirtualBox:/home/juan# sudo systemctl restart apache2

PARTE 2:

1.Acceder Mysql

```
root@juan-VirtualBox:/home/juan# sudo mysql
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.43-0ubuntu0.24.04.2 (Ubuntu)
Copyright (c) 2000, 2025, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> CREATE DATABASE wordpress;
Query OK, 1 row affected (0,01 sec)
mysql> CREATE USER 'wpuser'@'localhost'IDENTIFIED BY'WordPress123!';
Query OK, 0 rows affected (0,03 sec)
mysql> GRANT ALL PRIVILEGES ON wordpress.*TO'wpuser'@'localhost';
Query OK, 0 rows affected (0,01 sec)
mysql> FLUSH PRIVILEGES
   -> EXIT;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that correspon
for the right syntax to use near 'EXIT' at line 2
mysql> sudo mysql
    -> CREATE DATABASE wordpress;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that correspon
for the right syntax to use near 'sudo mysql
CREATE DATABASE wordpress' at line
```

```
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that correspon for the right syntax to use near 'sudo mysql CREATE DATABASE wordpress' at line 1 mysql> CREATE USER'wpuser'@'localhost'IDENTIFIED BY'WordPress123!'; ERROR 1396 (HY000): Operation CREATE USER failed for 'wpuser'@'localhost' mysql> GRANT ALL PRIVILEGES ON wordpress.*TO'wpuser'@'localhost'; Query OK, 0 rows affected (0,01 sec) mysql> FLUSH PRIVILEGES; Query OK, 0 rows affected (0,01 sec) mysql> EXIT; Bye root@juan-VirtualBox:/home/juan#
```

PARTE 3:

1.Descargar WordPress

2, Copiar archivos a Apache2

```
root@juan-VirtualBox:/tmp# tar -xzf latest.tar.gz
root@juan-VirtualBox:/tmp# sudo rm -rf /var/www/html/*
root@juan-VirtualBox:/tmp# sudo cp -r wordpress/* /var/www/html/
root@juan-VirtualBox:/tmp#
```

3.Permisos

```
root@juan-VirtualBox:/tmp# tar -xzf latest.tar.gz
root@juan-VirtualBox:/tmp# sudo rm -rf /var/www/html/*
root@juan-VirtualBox:/tmp# sudo cp -r wordpress/* /var/www/html/
root@juan-VirtualBox:/tmp# sudo chown -R www-data:www-data /var/www/html/
root@juan-VirtualBox:/tmp# sudo chmod -R 755 /var/www/html/
root@juan-VirtualBox:/tmp#
```

4. Configurar WP-Config. PHP

```
root@juan-VirtualBox:/tmp# sudo cp /var/www/html/wp-config-sample.php /var/www/html/wp-configuan-VirtualBox:/tmp# sudo nano /var/www/html/wp-config.php root@juan-VirtualBox:/tmp# sudo nano /var/www/html/wp-config.php root@juan-VirtualBox:/tmp# 
/** The name of the database for wordpress */
define( 'DB_NAME', 'wordpress' );

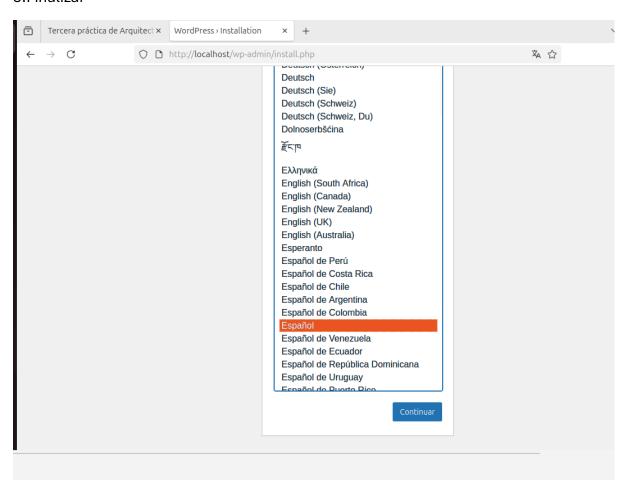
/** Database username */
define( 'DB_USER', 'wpuser' );

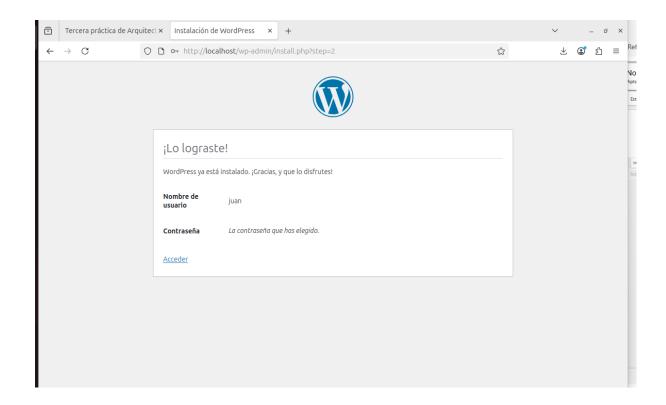
/** Database password */
define( 'DB_PASSWORD', 'WordPress123!' );

/** Database hostname */
define( 'DB_HOST', 'localhost' );

/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8' );
```

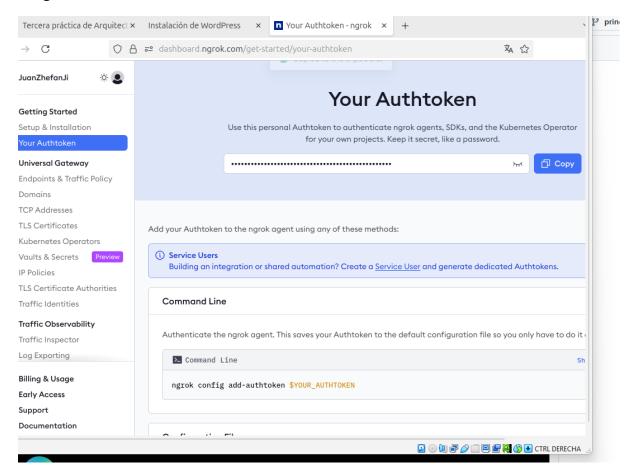
5.Finalizar





PARTE 4:

1.Ngrok



2.Instalar Ngork

```
:@juan-VirtualBox:~# tar -xvzf ngrok-v3-stable-linux-amd64.tgz
ok
:@juan-VirtualBox:~# sudo mv ngrok /usr/local/bin/
:@juan-VirtualBox:~# sudo snap install ngrok
ok (v3/stable) 3.29.0 desde Ngrok (ngrok-publisher) installed
:@juan-VirtualBox:~#
```

3. Verificación

```
:@juan-VirtualBox:~# ngrok version
ok version 3.30.0
:@juan-VirtualBox:~#
```

4. Autenticar

```
:@juan-VirtualBox:~# ngrok config add-authtoken 34Bh00E7aMQeoaSQuN3vDmIqi39_5fSQJW9966w3pAkZADtem
ntoken saved to configuration file: /root/.config/ngrok/ngrok.yml
:@juan-VirtualBox:~#
```

5. Iniciar túnel HTTP

```
root@juan-VirtualBox:~# ngrok http 80
ERROR: failed to start tunnel: Your account is requesting a dev domain that does not exist. Visit https://dashboard.ngr
ok.com/domains to request a dev domain.
ERROR:
ERROR: ERR_NGROK_15013
ERROR: https://ngrok.com/docs/errors/err_ngrok_15013
ERROR:
ERROR: com/docs/errors/err_ngrok_15013
ERROR:
root@juan-VirtualBox:~#
```

```
root@juan-VirtualBox:~# wget https://bin.equinox.io/c/bNyj1mQVY4c/ngrok-v3-stable-linux-amd64.tgz
--2025-10-17 12:03:08-- https://bin.equinox.io/c/bNyj1mQVY4c/ngrok-v3-stable-linux-amd64.tgz
Resolviendo bin.equinox.io (bin.equinox.io)... 99.83.220.108, 13.248.244.96, 35.71.179.82, ...
Conectando con bin.equinox.io (bin.equinox.io)[99.83.220.108]:443... conectado.
Petición HTTP enviada, esperando respuesta... 200 OK
Longitud: 9315483 (8,9M) [application/octet-stream]
Guardando como: 'ngrok-v3-stable-linux-amd64.tgz.2'
en 4.1s
2025-10-17 12:03:13 (2,16 MB/s) - 'ngrok-v3-stable-linux-amd64.tgz.2' guardado [9315483/9315483]
root@juan-VirtualBox:~# tar -xvzf ngrok-v3-stable-linux-amd64.tgz
ngrok
root@juan-VirtualBox:~# sudo mv ngrok /usr/local/bin/
root@juan-VirtualBox:~# sudo snap install ngrok
 El snap "ngrok" ya está instalado; consulte «snap help refresh»
 root@juan-VirtualBox:~# ngrok version
 ngrok version 3.30.0
ngrok version 3.30.0
root@juan-VirtualBox:~# ngrok config add-authtoken 34Bh00E7aMQeoaSQuN3vDmIqi39_5fSQJW9966w3pAkZADtem
Authtoken saved to configuration file: /root/.config/ngrok/ngrok.yml
root@juan-VirtualBox:~# ngrok http 80
ERROR: failed to start tunnel: Your account is requesting a dev domain that does not exist. Visit https://dashboard.ngr
ok.com/domains to request a dev domain.
ERROR:
 ERROR: ERR NGROK 15013
 ERROR: https://ngrok.com/docs/errors/err_ngrok_15013
 ERROR:
 root@juan-VirtualBox:~#
 × m ERR_NGROK_15× n Domains - ngrol × + V
                                                                                                                                                                   ⊻ © গৈ ≡
  ← → C;
                        ☆ ☆
                                                                                                  Ctrl K Ask Al
                                                                Q Search...
                                                                                                                                                                              -jó;-
```

