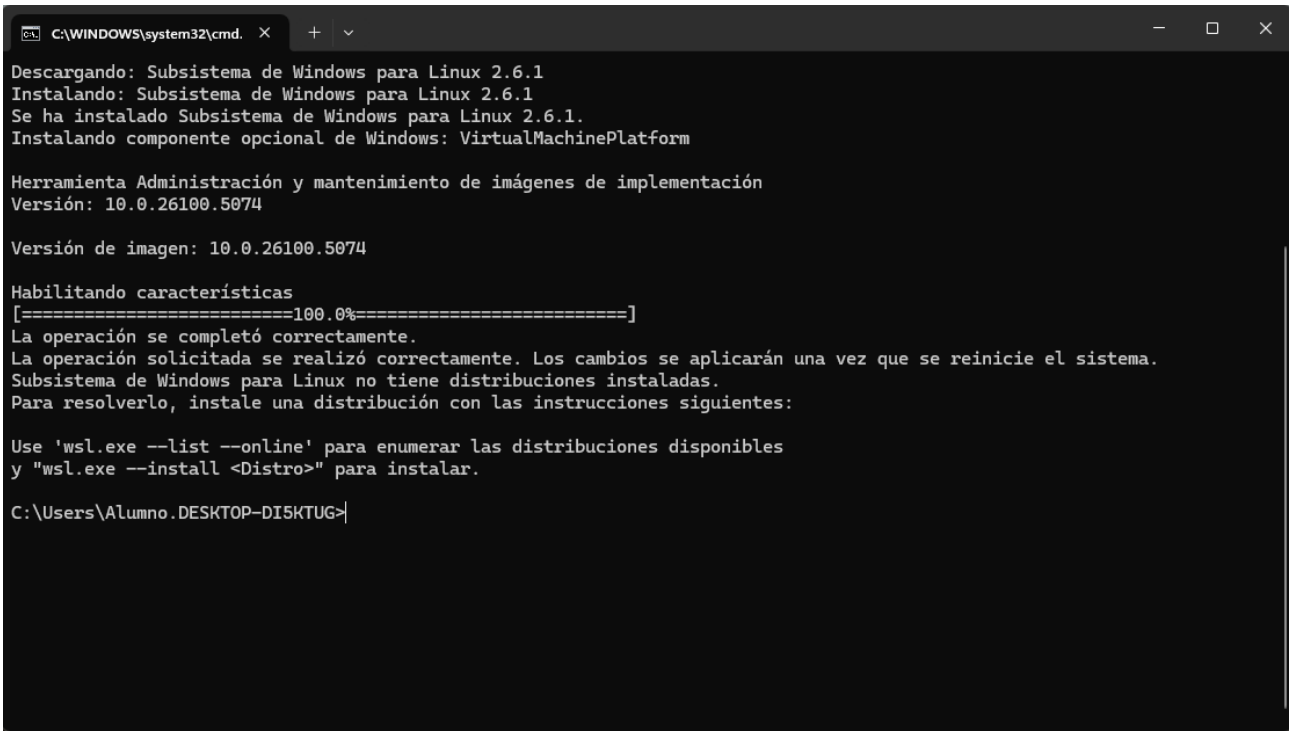
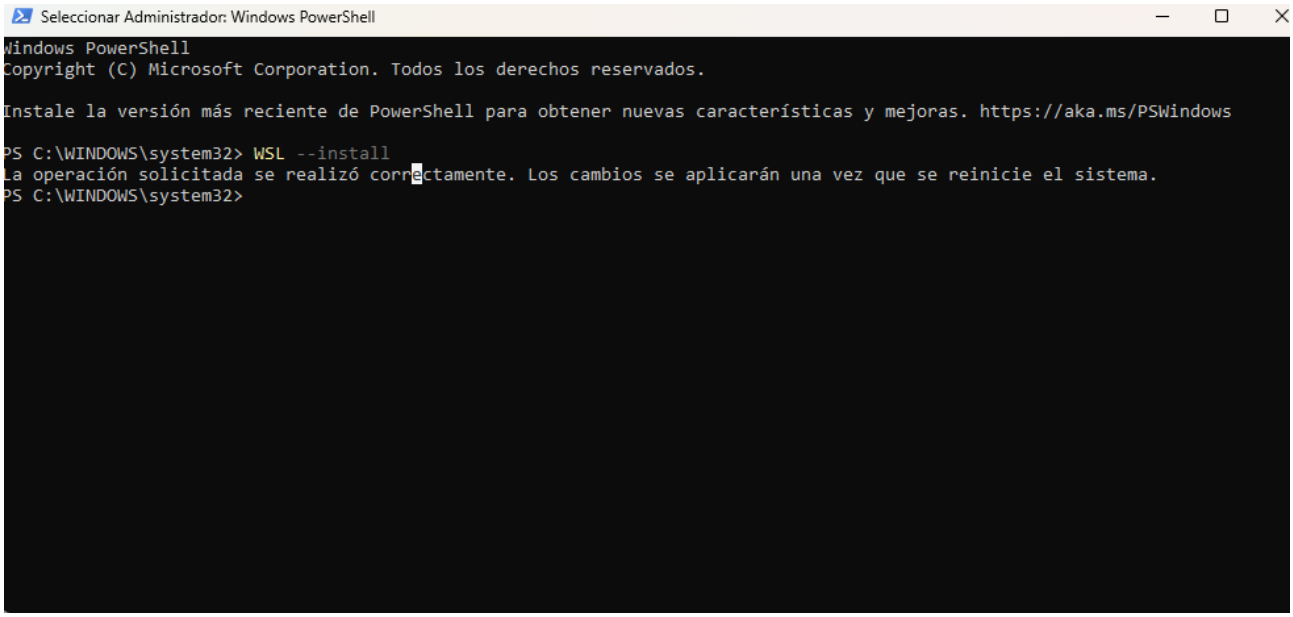
EVELYN ARCENTALES
30 DE SEPTIEMPRE DEL 2025

GUIAS DE INSTALACION DE APACHE , PHP Y NGINX



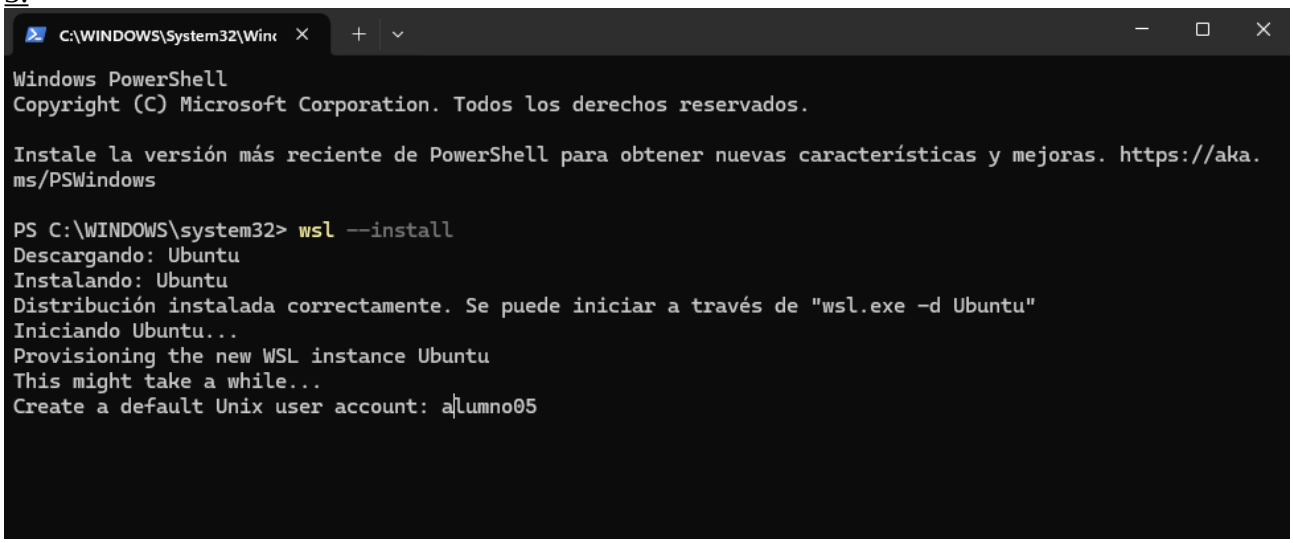
1. Instalación de WSL

2. verificación de instalación

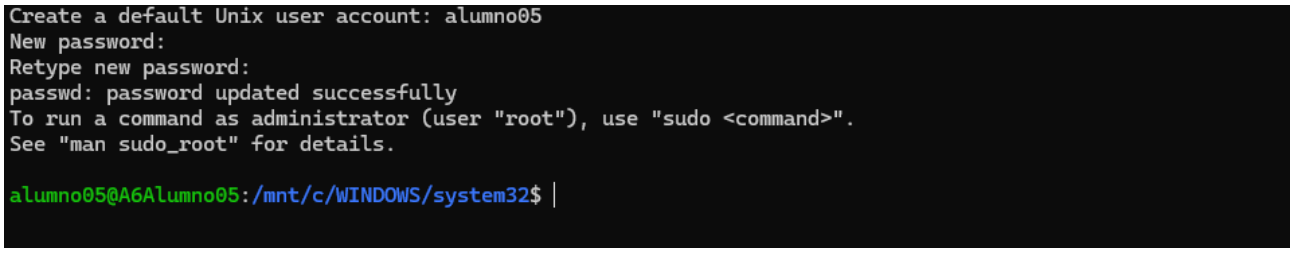


VISUAL GRÁFICA DE WSL

3.



4, creacion de contraseñas



5. Instalación para iniciar wsl.exe -d Ubuntu

..

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo wsl.exe -d Ubuntu
[sudo] password for alumno05:
sudo: wsl.exe: command not found
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$
```

ACTUALIZACIÓN DEL SISTEMA

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo apt update && sudo apt upgrade -y
Get:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Get:3 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [1171 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:5 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [198 kB]
Get:6 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.6 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [8744 B]
Get:8 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [880 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [195 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.3 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [18.0 kB]
Get:12 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [1872 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [423 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:15 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [520 B]
Get:16 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [28.0 kB]
Get:17 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [5228 B]
Get:18 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:19 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [384 B]
Get:20 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:21 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:22 http://archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:23 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:24 http://archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:25 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:26 http://archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:27 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
Get:28 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
Get:29 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1443 kB]
```

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INSTALACIÓN DE APACHE2

Se realiza la verificación del sistema con los comandos correspondientes

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo apt install apache2 -y
```

```
reated symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /usr/lib/system
l/system/apache-htcacheclean.service.
rocessing triggers for man-db (2.12.0-4build2) ...
rocessing triggers for libc-bin (2.39-0ubuntu8.6) ...
```

.

INSTALACIÓN PHP

Instala PHP y su modulo para Apache

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo apt install libapache2-mod-php -y
```

```
Creating config file /etc/php/8.3/cli/php.ini with new version
Setting up libapache2-mod-php8.3 (8.3.6-0ubuntu0.24.04.5) ...

Creating config file /etc/php/8.3/apache2/php.ini with new version
Module mpm_event disabled.
Enabling module mpm_prefork.
apache2_switch_mpm Switch to prefork
apache2_invoke: Enable module php8.3
Setting up libapache2-mod-php (2:8.3+93ubuntu2) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for php8.3-cli (8.3.6-0ubuntu0.24.04.5) ...
Processing triggers for libapache2-mod-php8.3 (8.3.6-0ubuntu0.24.04.5) ...
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$
```

.

INICIO DE APACHE

1. Desde WSL inicia el servicio de Apache

```
alumno05@A6Alumno05: ~
alumno05@A6Alumno05:~$ sudo service apache2 start
[sudo] password for alumno05:
```

.

VERIFICACIÓN ESTADO APACHE

Verificación del funcionamiento de Apache

```
alumno05@A6Alumno05:~$ 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 Tue 2025-09-30 10:03:02 CEST; 5min ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 9660 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 9663 (apache2)
      Tasks: 6 (limit: 9350)
     Memory: 10.4M (peak: 12.3M)
        CPU: 60ms
     CGroup: /system.slice/apache2.service
             ├─9663 /usr/sbin/apache2 -k start
             ├─9666 /usr/sbin/apache2 -k start
             ├─9667 /usr/sbin/apache2 -k start
             ├─9668 /usr/sbin/apache2 -k start
             ├─9669 /usr/sbin/apache2 -k start
             └─9670 /usr/sbin/apache2 -k start

Sep 30 10:03:02 A6Alumno05 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Sep 30 10:03:02 A6Alumno05 systemd[1]: Started apache2.service - The Apache HTTP Server.
alumno05@A6Alumno05:~$
```

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CREAR ARCHIVO PHP INFO

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ echo "<?php phpinfo(); ?>" | sudo tee /var/www/html/info.php
<?php phpinfo(); ?>
```

.

VERIFICAR EN NAVEGADOR

PHP Version 8.3.6

System	Linux A6Alumno05 6.6.87.2-microsoft-standard-WSL2 #1 SMP PREEMPT_DYNAMIC Thu Jun 5 18:30:46 UT 2025 x86_64
Build Date	Jul 14 2025 18:30:55
Build System	Linux
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.3/apache2
Loaded Configuration File	/etc/php/8.3/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/8.3/apache2/conf.d
Additional .ini files parsed	/etc/php/8.3/apache2/conf.d/10-opcache.ini, /etc/php/8.3/apache2/conf.d/10-pdo.ini, /etc/php/8.3/apache2/conf.d/20-calendar.ini, /etc/php/8.3/apache2/conf.d/20-ctype.ini, /etc/php/8.3/apache2/conf.d/20-exif.ini, /etc/php/8.3/apache2/conf.d/20-ffi.ini, /etc/php/8.3/apache2/conf.d/20-fileinfo.ini, /etc/php/8.3/apache2/conf.d/20-ftp.ini, /etc/php/8.3/apache2/conf.d/20-gettext.ini, /etc/php/8.3/apache2/conf.d/20-iconv.ini, /etc/php/8.3/apache2/conf.d/20-phar.ini, /etc/php/8.3/apache2/conf.d/20-posix.ini, /etc/php/8.3/apache2/conf.d/20-readline.ini, /etc/php/8.3/apache2/conf.d/20-shmop.ini, /etc/php/8.3/apache2/conf.d/20-sockets.ini, /etc/php/8.3/apache2/conf.d/20-sysvmsg.ini, /etc/php/8.3/apache2/conf.d/20-sysvsem.ini, /etc/php/8.3/apache2/conf.d/20-sysvshm.ini, /etc/php/8.3/apache2/conf.d/20-tokenizer.ini
PHP API	20230831
PHP Extension	20230831
Zend Extension	420230831
Zend Extension Build	API420230831,NTS
PHP Extension Build	API20230831,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
Zend Max Execution Timers	disabled
IPv6 Support	enabled
DTrace Support	disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3
Registered Stream Filters	zlib.*, string.rot13, string.toupper, string.tolower, convert.*, consumed, dechunk, convert.iconv.*

This program makes use of the Zend Scripting Language Engine:
Zend Engine v4.3.6, Copyright (c) Zend Technologies with Zend OPcache v8.3.6, Copyright (c), by Zend Technologies

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PARTE 2: SERVIDOR NGINX CON HTML

INSTALAR NGINX

Instala el servidor web Nginx

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo apt install nginx -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  libllvm19
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  nginx-common
Suggested packages:
  fcgiwrap nginx-doc
The following NEW packages will be installed:
  nginx nginx-common
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 564 kB of archives.
After this operation, 1596 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx-common all 1.24.0-2ubuntu7.5 [43.4
kB]
Get:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx amd64 1.24.0-2ubuntu7.5 [520 kB]
Fetched 564 kB in 1s (616 kB/s)
Preconfiguring packages ...
Selecting previously unselected package nginx-common.
(Reading database ... 41610 files and directories currently installed.)
Preparing to unpack .../nginx-common_1.24.0-2ubuntu7.5_all.deb ...
Unpacking nginx-common (1.24.0-2ubuntu7.5) ...
Selecting previously unselected package nginx.
Preparing to unpack .../nginx_1.24.0-2ubuntu7.5_amd64.deb ...
Unpacking nginx (1.24.0-2ubuntu7.5) ...
Setting up nginx-common (1.24.0-2ubuntu7.5) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/systemd/system/nginx
.service.
Could not execute systemctl:  at /usr/bin/deb-systemd-invoke line 148.
Setting up nginx (1.24.0-2ubuntu7.5) ...
Not attempting to start NGINX, port 80 is already in use.
Processing triggers for man-db (2.12.0-4build2) ...
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$
```

.

INICIAR NGINX

1.Inicia el servicio de Nginx. (procede error al generarlo)

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo service nginx start
Job for nginx.service failed because the control process exited with error code.
See "systemctl status nginx.service" and "journalctl -xeu nginx.service" for details.
```

,

2. se solventa la incidencia   (se apaga apache2)

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo service apache2 stop
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ sudo service nginx start
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$
```

.

CREAR ARCHIVO HTML

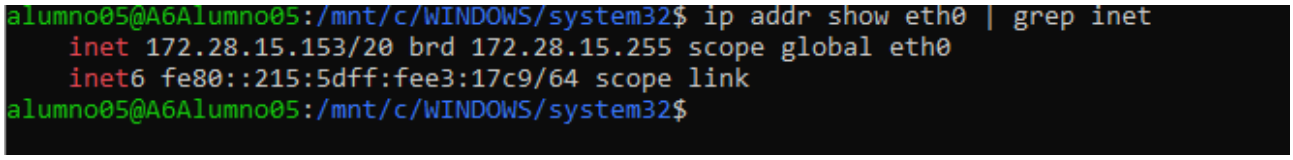
1. crear una pagina HTML simple.

```
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ echo "<h1>Hola Mundo desde Nginx</h1><p>Servidor funcionamiento corre
ctamente</p>" | sudo tee /var/www/html/index.html
<h1>Hola Mundo desde Nginx</h1><p>Servidor funcionamiento correctamente</p>
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$
```

2. verificación correcta

.

VER IP DE WSL


alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$ ip addr show eth0 | grep inet
inet 172.28.15.153/20 brd 172.28.15.255 scope global eth0
inet6 fe80::215:5dff:fee3:17c9/64 scope link
alumno05@A6Alumno05:/mnt/c/WINDOWS/system32$

DOCKER

1. Verificación de si esta instalado docker

```
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ sudo apt-get remove -y docker docker
-engine docker.io containerd runc
[sudo] password for alumno05:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Package 'docker' is not installed, so not removed
E: Unable to locate package docker-engine
```

.

2.actualización de repositorios

```
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ sudo apt-get update
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1443 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1485 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [299 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [378 kB]
Get:10 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:11 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:12 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7144 B]
Get:13 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.0 kB]
Get:14 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [212 B]
Get:15 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:16 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.6 kB]
Get:17 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.2 kB]
Get:18 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:19 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Fetched 4253 kB in 1s (4852 kB/s)
Reading package lists... Done
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$
```

.

3. instalación de paquetes necesarios

```
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ sudo apt-get install -y ca-certifica
tes curl gpg
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203).
ca-certificates set to manually installed.
curl is already the newest version (8.5.0-2ubuntu10.6).
curl set to manually installed.
gpg is already the newest version (2.4.4-2ubuntu17.3).
gpg set to manually installed.
The following package was automatically installed and is no longer required:
  libllvm19
Use 'sudo apt autoremove' to remove it.
0 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$
```

4. con estos comandos permite crear directorios con permisos específicos -m 0755 permite asignar permisos 7: lectura , escritura y ejecucion para el dueño, 5: lectura y ejecucion para grupos y otros, -d crea un directorio /etc/apt/keyrings crea una ruta estandar.

```
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ sudo install -m 0755 -d /etc/apt/key
rings
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$
```

5. Con esta opción permite obtener la clave GPG oficial de docker y convertirla, permite comprobar que los paquetes vienen firmados por docker y no estan alterados.

```
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ curl -fsSL https://download.docker.c
om/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$
```

```
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ sudo chmod a+r /etc/apt/keyrings/doc
ker.gpg
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.gpg] \
  https://download.docker.com/linux/ubuntu \
  $(. /etc/os-release && echo "${UBUNTU_CODENAME:-$VERSION_CODENAME}") stable" | \
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$ sudo apt-get update
Get:1 https://download.docker.com/linux/ubuntu noble InRelease [48.8 kB]
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:3 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Get:5 https://download.docker.com/linux/ubuntu noble/stable amd64 Packages [31.1 kB]
Hit:6 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Fetched 79.9 kB in 0s (319 kB/s)
Reading package lists... Done
alumno05@A6Alumno05:/mnt/c/Users/Alumno.DESKTOP-DI5KTUG$
```