

Ujian Akhir Semeseter

**LAPORAN SISTEM OPERASI**



**Disusun Oleh :**

**IID MUJAHID (241111102)**

**FAKULTAS TEKNOLOGI INFORMASI  
PROGRAM STUDI INFORMATIKA  
UNIVERSITAS NAHDLATUL ULAMA YOGYAKARTA  
2025**

## **Materi: Sistem Operasi**

### **1. Tujuannya:**

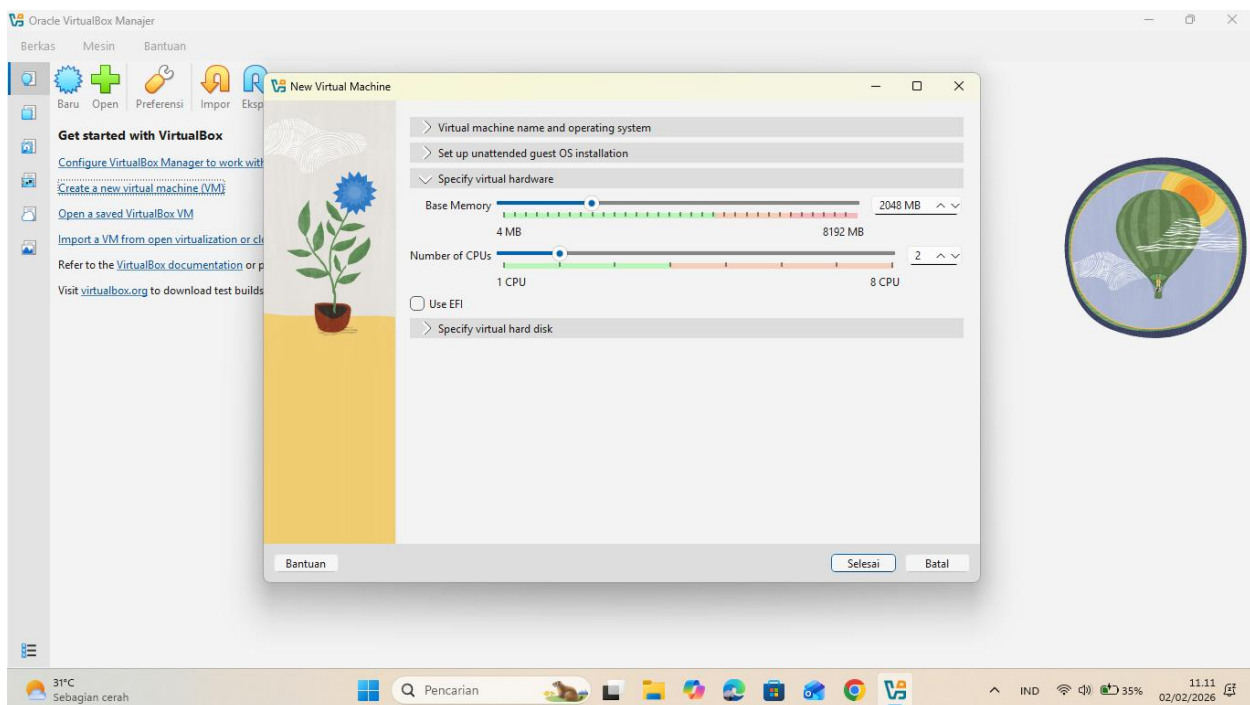
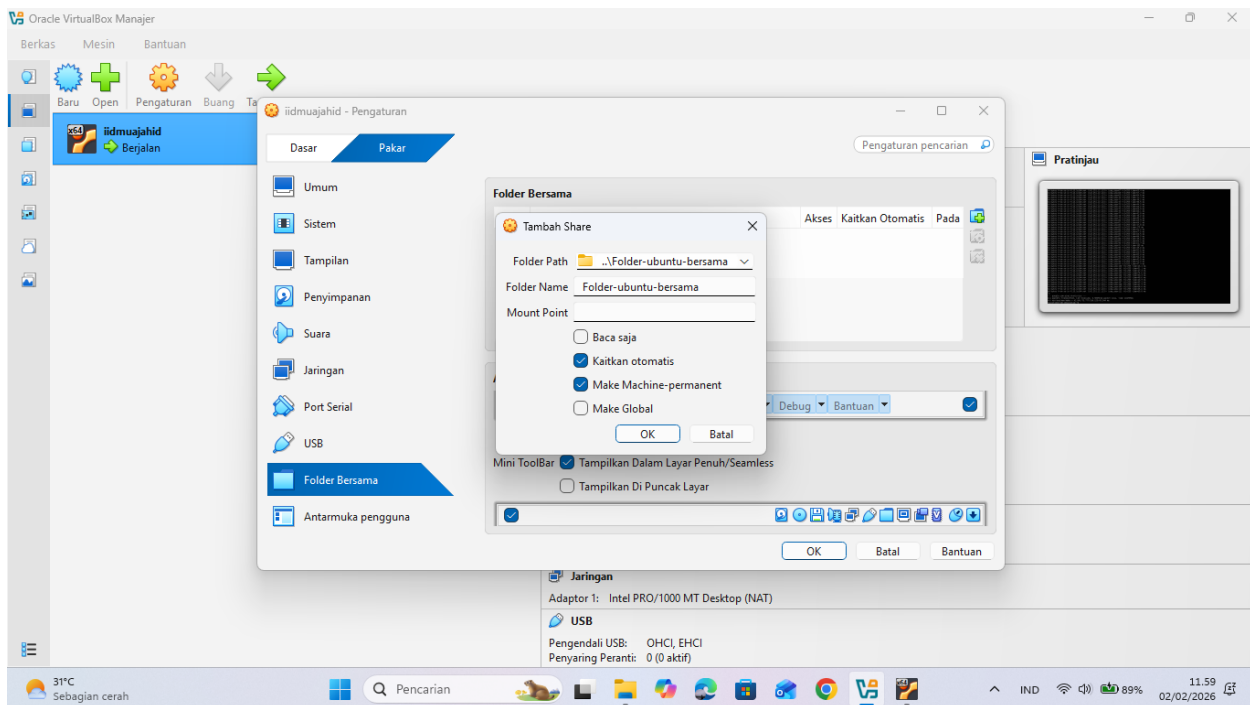
1. Mahasiswa dapat memahami dan mengetahui linux ubuntu di dalam window virtualbox

Tools yang digunakan

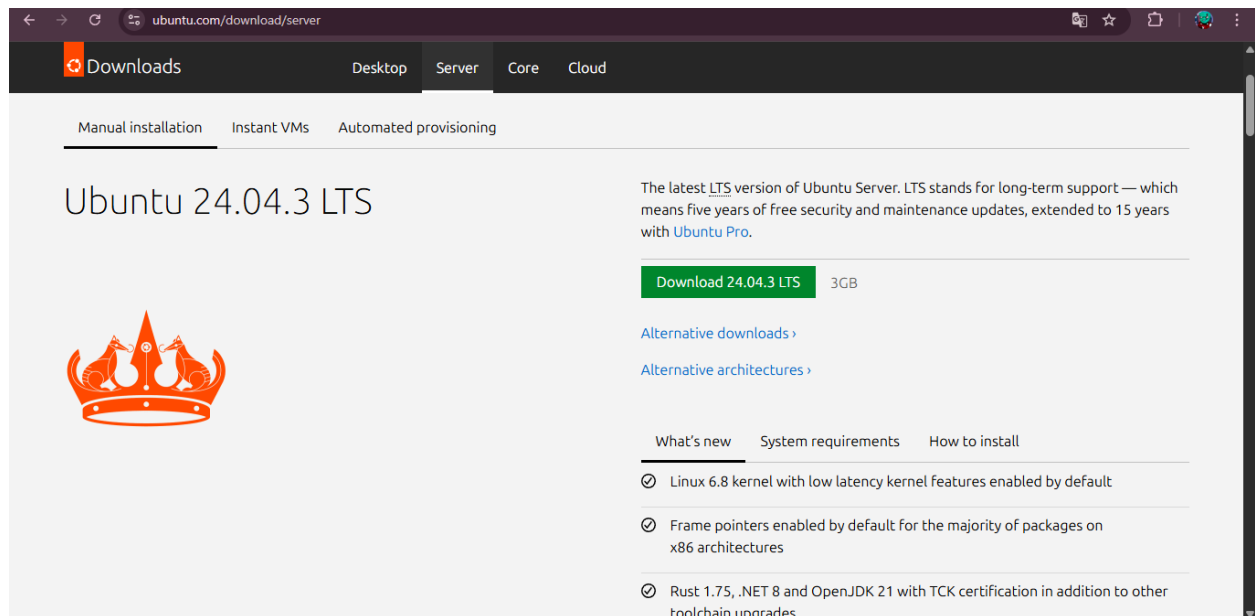
- Laptop
- Oracle VirtualBox
- Server Ubuntu

Berisi langkah-langkah sistem operasi ubuntu

## Install oracle virtual box



Lalu Install server ubuntu



The screenshot shows the Ubuntu 24.04.3 LTS download page. The page has a dark header with navigation links: Downloads, Desktop, Server, Core, and Cloud. Below the header, there are tabs for Manual installation, Instant VMs, and Automated provisioning. The main content area features the Ubuntu logo, the version number 'Ubuntu 24.04.3 LTS', and a green 'Download 24.04.3 LTS' button with '3GB' next to it. To the right of the button, there is a description of LTS (Long-Term Support) and links for 'Alternative downloads' and 'Alternative architectures'. Below this, there are sections for 'What's new', 'System requirements', and 'How to install'. The 'What's new' section lists three updates: Linux 6.8 kernel, Frame pointers, and Rust 1.75, .NET 8, and OpenJDK 21.

Downloads Desktop Server Core Cloud

Manual installation Instant VMs Automated provisioning

## Ubuntu 24.04.3 LTS

The latest LTS version of Ubuntu Server. LTS stands for long-term support — which means five years of free security and maintenance updates, extended to 15 years with [Ubuntu Pro](#).

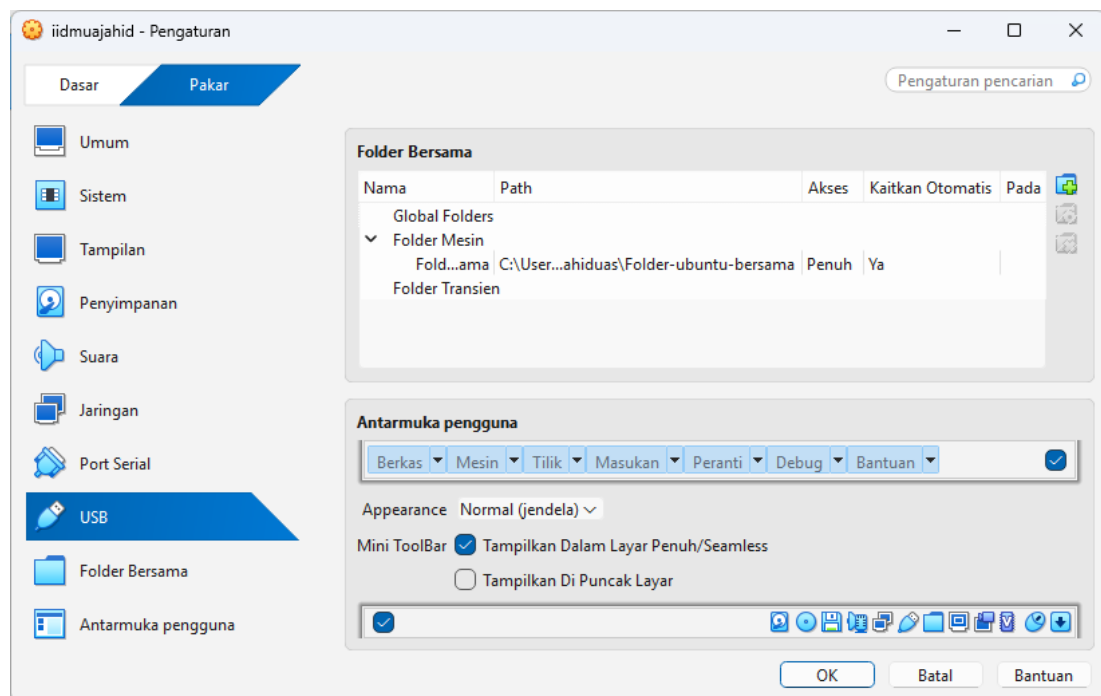
[Download 24.04.3 LTS](#) 3GB

[Alternative downloads](#) >

[Alternative architectures](#) >

What's new System requirements How to install

- Linux 6.8 kernel with low latency kernel features enabled by default
- Frame pointers enabled by default for the majority of packages on x86 architectures
- Rust 1.75, .NET 8 and OpenJDK 21 with TCK certification in addition to other toolchain upgrades



The screenshot shows the 'iidmuajahid - Pengaturan' window. The window has a sidebar with categories: Umum, Sistem, Tampilan, Penyimpanan, Suara, Jaringan, Port Serial, USB, Folder Bersama, and Antarmuka pengguna. The 'Folder Bersama' category is selected. The main area shows a table of shared folders. The table has columns: Nama, Path, Akses, Kaitkan Otomatis, and Pada. The table lists 'Global Folders', 'Folder Mesin', 'Fold...ama', and 'Folder Transien'. The 'Fold...ama' row shows the path 'C:\User...ahiduas\Folder-ubuntu-bersama' and 'Penuh Ya'. Below the table, there is a section for 'Antarmuka pengguna' with a dropdown menu for 'Berkas', 'Mesin', 'Tilik', 'Masukan', 'Peranti', 'Debug', and 'Bantuan'. The 'Antarmuka pengguna' section also has a 'Mini ToolBar' with a checkbox for 'Tampilkan Dalam Layar Penuh/Seamless' and a checkbox for 'Tampilkan Di Puncak Layar'. The window has 'OK', 'Batal', and 'Bantuan' buttons at the bottom.

iidmuajahid - Pengaturan

Dasar Pakar

Pengaturan pencarian

Umum Sistem Tampilan Penyimpanan Suara Jaringan Port Serial USB Folder Bersama Antarmuka pengguna

### Folder Bersama

Nama	Path	Akses	Kaitkan Otomatis	Pada
Global Folders				
Folder Mesin				
Fold...ama	C:\User...ahiduas\Folder-ubuntu-bersama	Penuh	Ya	
Folder Transien				

### Antarmuka pengguna

Berkas Mesin Tilik Masukan Peranti Debug Bantuan

Appearance Normal (jendela)

Mini ToolBar ☒ Tampilkan Dalam Layar Penuh/Seamless ☐ Tampilkan Di Puncak Layar

OK Batal Bantuan

```
iidmujahid [Berjalan] - Oracle VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan

mujahiddini@iidmujahid:~/docker-web$ echo "<?php echo '<h1>Hello Saya iid! PHP ini jalan di Docker</h1>';?>"index.php
<?php echo '<h1>Hello Saya iid! PHP ini jalan di Docker</h1>';?>index.php
mujahiddini@iidmujahid:~/docker-web$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker.sock/v1.50/containers/json": dial unix /var/run/docker.sock: connect: permission denied
mujahiddini@iidmujahid:~/docker-web$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker.sock/v1.50/containers/json": dial unix /var/run/docker.sock: connect: permission denied
mujahiddini@iidmujahid:~/docker-web$
mujahiddini@iidmujahid:~/docker-web$
mujahiddini@iidmujahid:~/docker-web$ sudo docker ps
sudo! password for mujahiddini:
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
mujahiddini@iidmujahid:~/docker-web$ echo -e "services:\n web:\n image: php:8.2-apache\n volumes:\n - '0000:00'" > docker-compose.yml
mujahiddini@iidmujahid:~/docker-web$ cat docker-compose.yml
services:
  web:
    image: php:8.2-apache
    volumes:
      - '0000:00'
mujahiddini@iidmujahid:~/docker-web$ echo -e "services:\n web:\n image: php:8.2-apache\n volume:\n - ./var/www/html\n ports:\n - '0000:00'" > docker-compose.yml
mujahiddini@iidmujahid:~/docker-web$ sudo docker-compose up -d
sudo! password for mujahiddini:
ERROR: yaml.scanner.ScannerError: while scanning a simple key
in "/docker-compose.yml", line 7, column 2
could not find expected ':'
in "/docker-compose.yml", line 8, column 1
mujahiddini@iidmujahid:~/docker-web$
mujahiddini@iidmujahid:~/docker-web$ cat docker-compose.yml
services:
  web:
    image: php:8.2-apache
    volume:
      - ./var/www/html
    ports:
      - '0000:00'
mujahiddini@iidmujahid:~/docker-web$
```

```
iidmujahid [Berjalan] - Oracle VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
mujahiddini@iidmujahid:~$ sudo systemctl start docker
mujahiddini@iidmujahid:~$ sudo systemctl start docker
mujahiddini@iidmujahid:~$ From nginx:alpine
Command 'From' not found, did you mean:
  command 'from' from deb mailutils (1:3.16-1build1)
Try: sudo apt install <deb name>
mujahiddini@iidmujahid:~$ mujahiddini
mujahiddini: command not found
mujahiddini@iidmujahid:~$ mujahid1
mujahid1: command not found
mujahiddini@iidmujahid:~$ mujahiddini1
mujahiddini1: command not found
mujahiddini@iidmujahid:~$ mujahiddini1
mujahiddini1: command not found
mujahiddini@iidmujahid:~$ docker build -t web-app
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
             Install the buildx component to build images with BuildKit:
             https://docs.docker.com/go/buildx/

docker: 'docker build' requires 1 argument

Usage: docker build [OPTIONS] PATH | URL | -

Run 'docker build --help' for more information
mujahiddini@iidmujahid:~$ docker run -d -p 0000:00 web-app
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%2Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied

Run 'docker run --help' for more information
mujahiddini@iidmujahid:~$
```

## Ping google.com

```
Mujahid [Berjalan] - Oracle VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan

4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=9 ttl=255 time=29.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=10 ttl=255 time=38.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=11 ttl=255 time=28.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=12 ttl=255 time=27.6 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=13 ttl=255 time=27.3 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=14 ttl=255 time=28.0 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=15 ttl=255 time=27.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=16 ttl=255 time=30.9 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=17 ttl=255 time=28.0 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=18 ttl=255 time=27.3 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=19 ttl=255 time=30.5 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=20 ttl=255 time=46.9 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=21 ttl=255 time=97.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=22 ttl=255 time=38.7 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=23 ttl=255 time=27.4 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=24 ttl=255 time=27.9 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=25 ttl=255 time=28.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=26 ttl=255 time=26.9 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=27 ttl=255 time=40.7 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=28 ttl=255 time=27.5 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=29 ttl=255 time=29.3 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=30 ttl=255 time=26.2 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=31 ttl=255 time=52.4 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=32 ttl=255 time=29.6 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=33 ttl=255 time=27.4 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=34 ttl=255 time=31.3 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=35 ttl=255 time=29.5 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=36 ttl=255 time=26.7 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=37 ttl=255 time=38.0 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=38 ttl=255 time=30.4 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=39 ttl=255 time=26.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=40 ttl=255 time=27.0 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=41 ttl=255 time=27.9 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=42 ttl=255 time=28.0 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=43 ttl=255 time=42.3 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=44 ttl=255 time=27.2 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=45 ttl=255 time=31.9 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=46 ttl=255 time=27.2 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=47 ttl=255 time=36.9 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=48 ttl=255 time=210 ms
```

```
iidmujahid [Berjalan] - Oracle VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
mujahiddini@iidmujahid:~$ sudo systemctl start docker
mujahiddini@iidmujahid:~$ sudo systemctl start docker
mujahiddini@iidmujahid:~$ From ngnux:alpine
Command 'From' not found, did you mean:
  command 'from' from deb mailutils (1:3.16-1build1)
Try: sudo apt install <deb name>
mujahiddini@iidmujahid:~$ muajahiddini
mujahiddini: command not found
mujahiddini@iidmujahid:~$ muajahidi
mujahidi: command not found
mujahiddini@iidmujahid:~$ Muajahiddini
Muajahiddini: command not found
mujahiddini@iidmujahid:~$ muajahiddini
muajahiddini: command not found
mujahiddini@iidmujahid:~$ docker build -t web-app
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

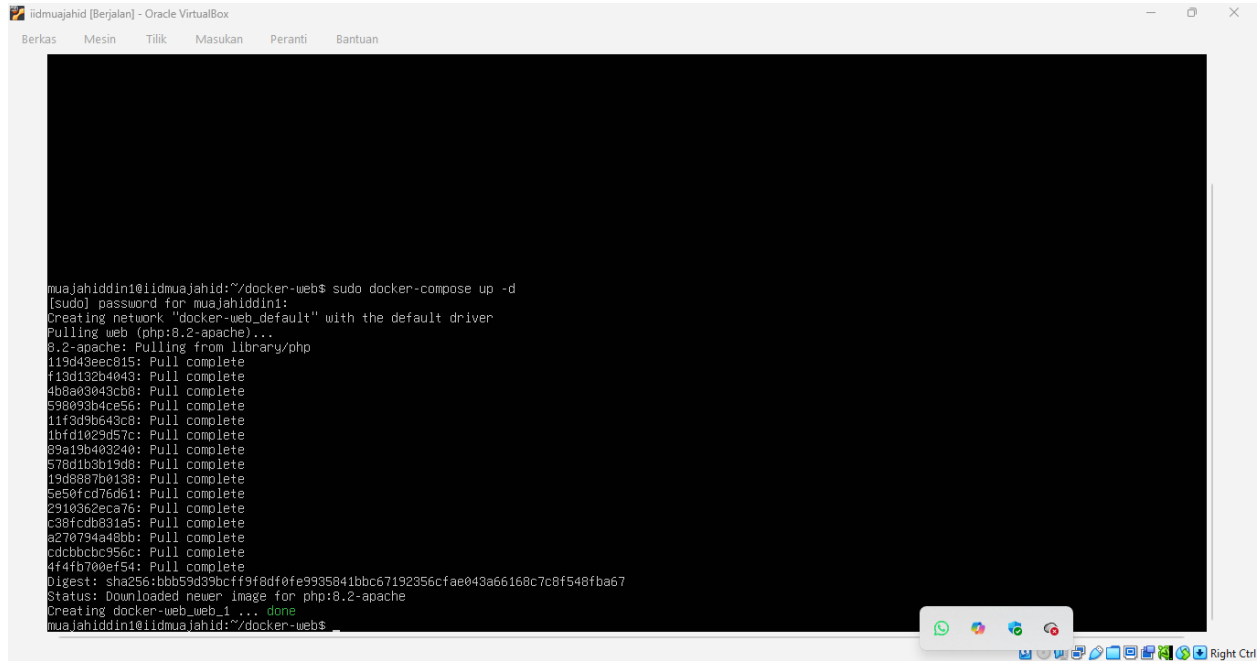
docker: 'docker build' requires 1 argument

Usage: docker build [OPTIONS] PATH | URL | -

Run 'docker build --help' for more information
mujahiddini@iidmujahid:~$ docker run -d -p 8080:80 web-app
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%2Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied

Run 'docker run --help' for more information
mujahiddini@iidmujahid:~$
```

Yang terakhir jalankan linux ubuntu didalam virtualbox.



```
iidmujahid [Berjalan] - Oracle VM VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan

mujahiddin1@iidmujahid:~/docker-web$ sudo docker-compose up -d
[sudo] password for mujahiddin1:
Creating network "docker-web_default" with the default driver
Pulling web (php:8.2-apache)...
8.2-apache: Pulling from library/php
119d43eac815: Pull complete
f13d132b4043: Pull complete
4b8a03043cb8: Pull complete
598093b44ce56: Pull complete
11f3d9b643c8: Pull complete
1bfd1029d57c: Pull complete
89a19b403240: Pull complete
578d1b3b19d8: Pull complete
19d8887b0138: Pull complete
5e50fcd76d61: Pull complete
2910362ec376: Pull complete
c38fcd8831a5: Pull complete
a270794a48bb: Pull complete
cdcbbcbc955c: Pull complete
4f4fb700ef54: Pull complete
Digest: sha256:bbb59d39bcff9f8df0fe9935841bbc67192356cfae043a66168c7c8f548fba67
Status: Downloaded newer image for php:8.2-apache
Creating docker-web_web_1 ... done
mujahiddin1@iidmujahid:~/docker-web$
```