

Ujian Akhir Semeseter

LAPORAN SISTEM OPERASI



Disusun Oleh :

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

Materi: Sistem Operasi

1. Tujuannya:

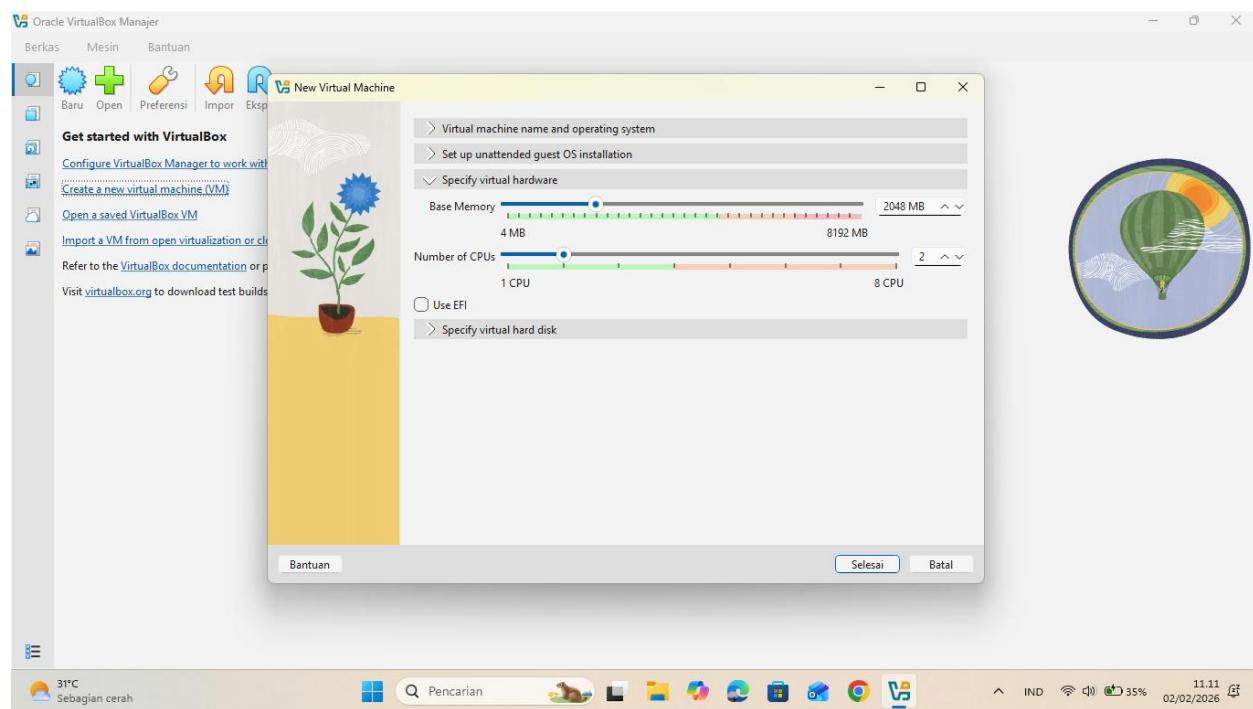
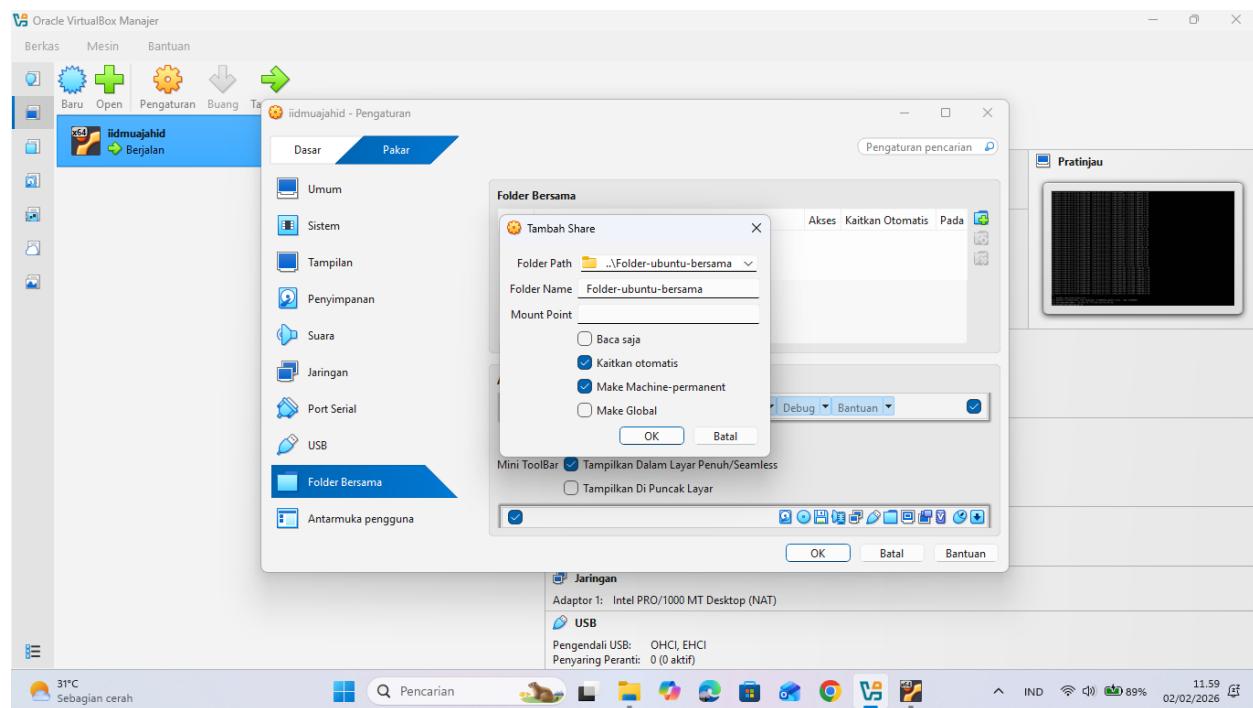
1. Mahasiswa dapat memahami dan mengetahui linux ubuntu di dalam window virtualbox

Tools yang digunakan

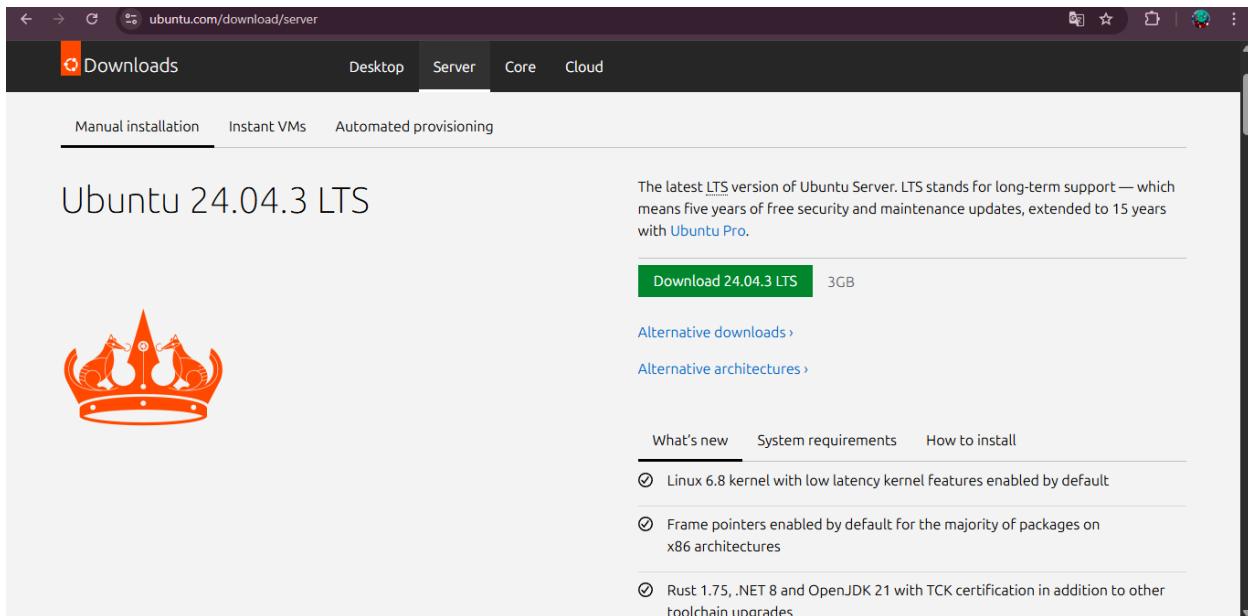
- Laptop
- Oracle VirtualBox
- Server Ubuntu

Berisi langkah-langkah sistem operasi ubuntu

Install oracle virtual box

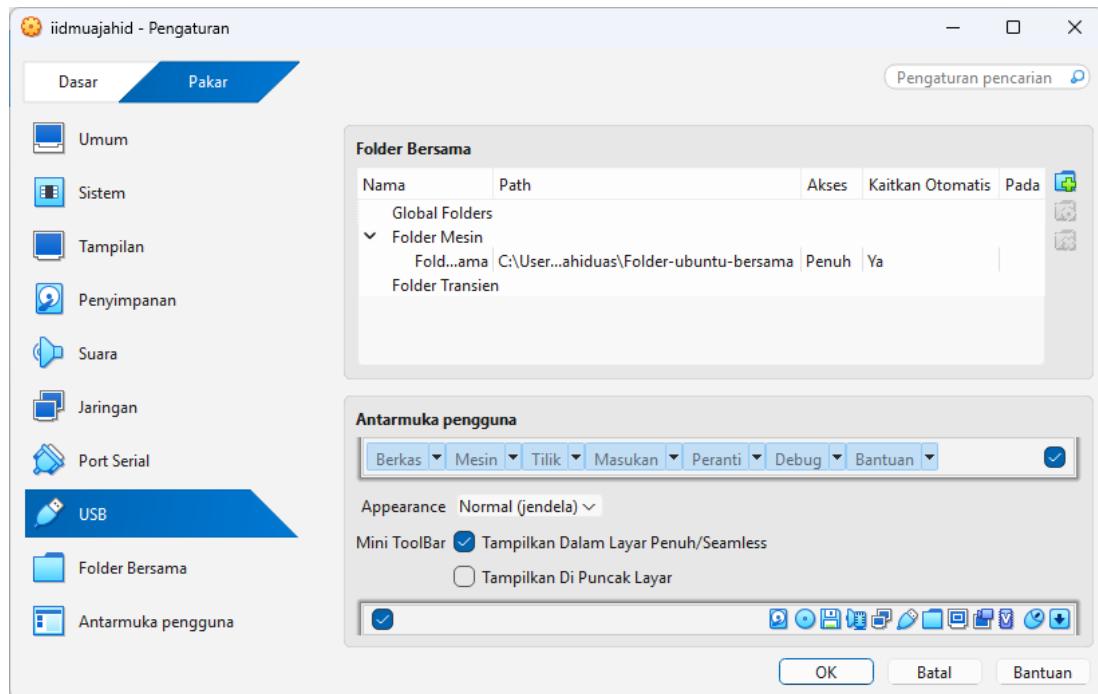


Lalu Install server ubuntu



The screenshot shows the Ubuntu Server download page at ubuntu.com/download/server. The page is titled "Ubuntu 24.04.3 LTS". It features a large orange crown icon. Below the title, it says: "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." A prominent green button labeled "Download 24.04.3 LTS" with a "3GB" label is visible. Below the download button are links for "Alternative downloads >" and "Alternative architectures >". At the bottom, there's a section titled "What's new" with three bullet points:

- ② Linux 6.8 kernel with low latency kernel features enabled by default
- ② Frame pointers enabled by default for the majority of packages on x86 architectures
- ② Rust 1.75, .NET 8 and OpenJDK 21 with TCK certification in addition to other toolchain upgrades



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

$ docker run -it --rm alpine /bin/sh
#!/bin/sh
jahiddin@iidmuajahid:~/docker-web$ echo '<?php echo <hi>Hello Saya iid! PHP ini jalan di Docker</hi>'?>"index.php
?php echo '<hi>Hello Saya iid! PHP ini jalan di Docker</hi>'?>index.php
jahiddin@iidmuajahid:~/docker-web$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%%var%%run%%2fdocker.sock/v1.50/containers/js": dial unix /var/run/docker.sock: connect: permission denied
jahiddin@iidmuajahid:~/docker-web$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%%var%%run%%2fdocker.sock/v1.50/containers/js": dial unix /var/run/docker.sock: connect: permission denied
jahiddin@iidmuajahid:~/docker-web$ docker ps
jahiddin@iidmuajahid:~/docker-web$ docker ps
jahiddin@iidmuajahid:~/docker-web$ sudo docker ps
sudo password for muajahiddin:
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
jahiddin@iidmuajahid:~/docker-web$ echo -e "services:\n web:\n image: php:8.2-apache\n volumes:\n - '8000:80'" > docker-compose.yml
jahiddin@iidmuajahid:~/docker-web$ cat docker-compose.yml
version: '3'
services:
  web:
    image: php:8.2-apache
    volumes:
      - 8000:80
jahiddin@iidmuajahid:~/docker-web$ echo -e "services:\n web:\n image: php:8.2-apache\n volume:\n - ./var/www/html\n ports:\n - '8000:80'" > docker-compose.yml
jahiddin@iidmuajahid:~/docker-web$ sudo docker-compose up -d
sudo password for muajahiddin:
ERROR: yaml.scanner.ScannerError: while scanning a simple key
  in ".docker-compose.yml", line 7, column 2
  did not find expected '|'
  in ".docker-compose.yml", line 8, column 1
jahiddin@iidmuajahid:~/docker-web$ docker-compose up -d
jahiddin@iidmuajahid:~/docker-web$ cat docker-compose.yml
version: '3'
services:
  web:
    image: php:8.2-apache
    volume:
      - ./var/www/html
    ports:
      - 8000:80
jahiddin@iidmuajahid:~/docker-web$
```

```
iidmuajahid [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.
muajahiddini@iidmuajahid:~$ sudo systemctl start docker
muajahiddini@iidmuajahid:~$ sudo systemctl start docker
muajahiddini@iidmuajahid:~$ From nlinuxvalpine
Command 'From' not found, did you mean:
  command 'from' from deb mailutils (1:3.16-1build1)
Try: sudo apt install <deb name>
muajahiddini@iidmuajahid:~$ muajahiddini
muajahiddini: command not found
muajahiddini@iidmuajahid:~$ muajahidi
muajahidi: command not found
muajahiddini@iidmuajahid:~$ Muajahiddini
Muajahiddini: command not found
muajahiddini@iidmuajahid:~$ muajahiddini
muajahiddini: command not found
muajahiddini@iidmuajahid:~$ 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
muajahiddini@iidmuajahid:~$ docker run -d -p 8000:80 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": o
al unix /var/run/docker.sock: connect: permission denied

Run 'docker run --help' for more information
muajahiddini@iidmuajahid:~$
```

Ping google.com

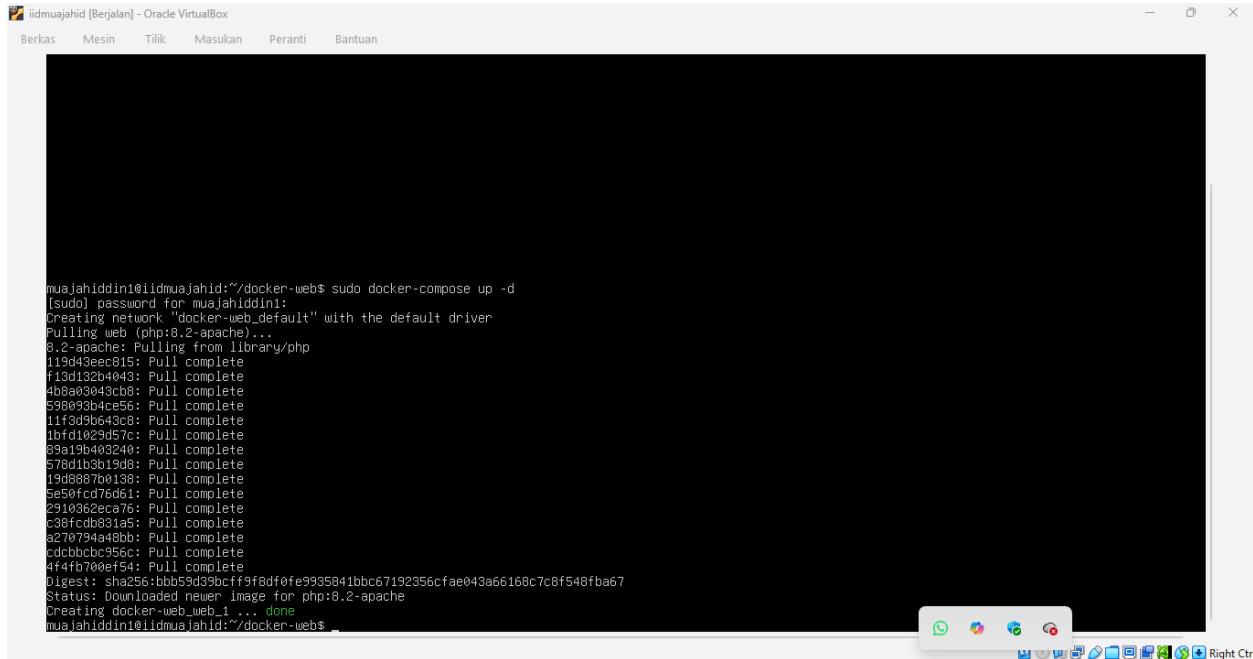
```
bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=9 ttl=255 time=29.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=10 ttl=255 time=38.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): icmp_seq=11 ttl=255 time=28.8 ms
4 bytes from any-in-2678.1e100.net (216.239.38.120): 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=27.8 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
```

```
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.
muajahiddin@iildmuajahid:~$ sudo systemctl start docker
muajahiddin@iildmuajahid:~$ sudo systemctl start docker
muajahiddin@iildmuajahid:~$ 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>'.
muajahiddin@iildmuajahid:~$ muajahiddin
muajahiddin: command not found
muajahiddin@iildmuajahid:~$ muajahidi
muajahidi: command not found
muajahiddin@iildmuajahid:~$ Muajahiddin
Muajahiddin: command not found
muajahiddin@iildmuajahid:~$ muajahiddin
muajahiddin: command not found
muajahiddin@iildmuajahid:~$ docker build -t web-app
DEPRECATE: 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
muajahiddin@iildmuajahid:~$ docker run -d -p 8000:80 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
muajahiddin@iildmuajahid:~$
```

Yang trakhir jalankan linux ubuntu didalam virtualbox.



A screenshot of a Linux terminal window titled "iidmuajahid [Berjalan] - Oracle VirtualBox". The window shows the command "sudo docker-compose up -d" being run. The output indicates that a network named "docker-web_default" is being created, and it lists several Docker images being pulled, including "php:8.2-apache" and "8.2-apache". It also shows the download of a newer image for "php:8.2-apache" and the creation of a container named "docker-web_web_1". The terminal prompt ends with a tilde (~).

```
iidmuajahid@iidmuajahid:~/docker-web$ sudo docker-compose up -d
[sudo] password for iidmuajahid:
Creating network "docker-web_default" with the default driver
Pulling web (php:8.2-apache)...
8.2-apache: Pulling from library/php
119d43eef815: Pull complete
f13d132b4043: Pull complete
408a03043cc8: Pull complete
598093b4ce56: Pull complete
11f3d9b643c8: Pull complete
1bfd1029d57c: Pull complete
89a19b403240: Pull complete
578d1b3b19d8: Pull complete
19d8887b0138: Pull complete
5e50fcfd76061: Pull complete
2310362eca76: Pull complete
c38fcfdb831a5: Pull complete
a276794a48bb: Pull complete
cdcbccb956c: Pull complete
4f4fb700ef54: Pull complete
Digest: sha256:bbb59d39bcff9f8df0fe9935841bbc67192356cfae043a66168c7c8f548fba67
Status: Downloaded newer image for php:8.2-apache
Creating docker-web_web_1 ... done
iidmuajahid@iidmuajahid:~/docker-web$
```