

Laporan Pemrosesan Paralel



OLEH:

Nama : Almirah Callysta Aurelie

NIM : 09011282227090

Kelas : SK5C

Dosen Pengampuh : Adi Hermansyah, S.Kom., M.T

Mata Kuliah : Pemrosesan Paralel

FAKULTAS ILMU KOMPUTER

SISTEM KOMPUTER

2023

- Menampilkan Apache pada Ubuntu

1. Login sebagai user

```
[ 39.966371] cloud-init[1199]: 2023-10-25 06:48:41,326 - cc_final_message.py[WARNING]: Used fallback datasource

Ubuntu 18.04.6 LTS mira tty1

mira login: almirah
Password:
Last login: Tue Oct 24 10:32:26 UTC 2023 on tty1

Welcome to Ubuntu 18.04.6 LTS (GNU/Linux 4.15.0-213-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:   https://landscape.canonical.com
 * Support:      https://ubuntu.com/advantage

System information as of Wed Oct 25 06:50:01 UTC 2023

System load: 0.89          Processes:           93
Usage of /:  19.5% of 19.52GB Users logged in:      0
Memory usage: 7%          IP address for enp0s3: 10.1.41.66
Swap usage:  0%

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
   just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

42 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
```

2. Gunakan perintah “sudo apt update” untuk memperbarui daftar paket yang tersedia

```
almirah@mira:~$ sudo apt update
[sudo] password for almirah:
Hit:1 http://id.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://id.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://id.archive.ubuntu.com/ubuntu bionic-security InRelease
Reading package lists... Done
Building dependency tree
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
almirah@mira:~$ _
```

3. Menginstall apache dengan perintah “sudo apt install apache2”

```
almirah@mira:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
apache2 is already the newest version (2.4.29-1ubuntu4.27).
0 upgraded, 0 newly installed, 0 to remove and 42 not upgraded.
almirah@mira:~$ _
```

4. Mengecek apk yang diinstall dengan perintah “sudo ufw app list”

```
almirah@mira:~$ sudo ufw app list
Available applications:
  Apache
  Apache Full
  Apache Secure
  OpenSSH
almirah@mira:~$ _
```

5. Gunakan perintah “sudo systemctl status apache2”

```
almirah@mira:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Drop-In: /lib/systemd/system/apache2.service.d
            └─apache2-systemd.conf
   Active: active (running) since Wed 2023-10-25 06:48:31 UTC; 16min ago
   Process: 974 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 1037 (apache2)
     Tasks: 55 (limit: 2311)
   CGroup: /system.slice/apache2.service
           └─1037 /usr/sbin/apache2 -k start
             1040 /usr/sbin/apache2 -k start
             1041 /usr/sbin/apache2 -k start

Okt 25 06:48:30 mira systemd[1]: Starting The Apache HTTP Server...
Okt 25 06:48:31 mira apachectl[974]: AH00558: apache2: Could not reliably determine the server's full
Okt 25 06:48:31 mira systemd[1]: Started The Apache HTTP Server.
lines 1-16/16 (END)
```

6. Mengecek apakah status apache telah aktif dengan perintah “sudo ufw status” apabila status inactive maka perlu diaktifkan dengan mengetik “sudo ufw enable”

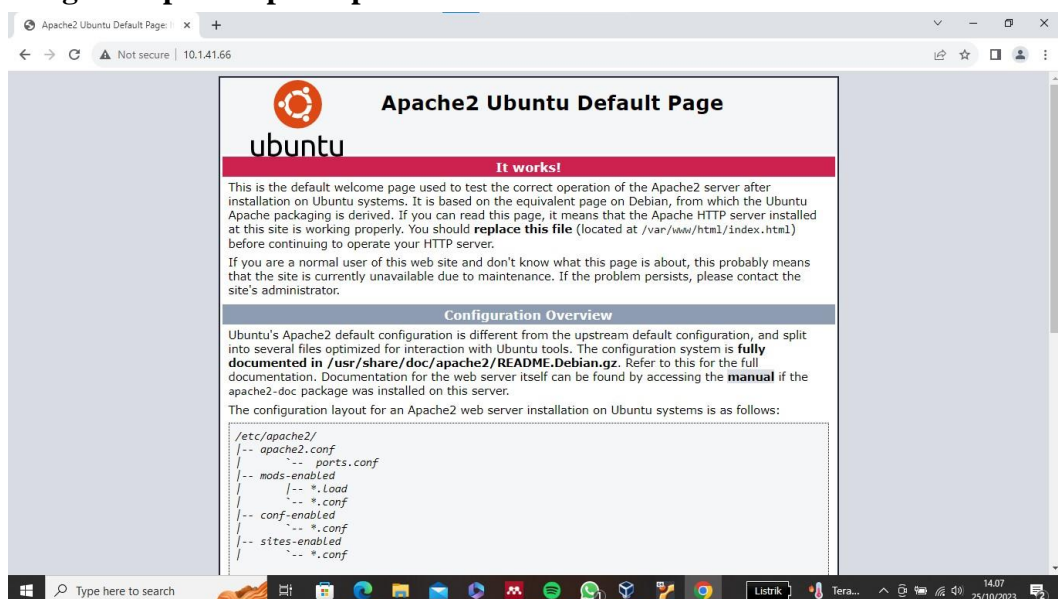
```
almirah@mira:~$ sudo ufw status
Status: inactive
almirah@mira:~$ sudo ufw enable
Firewall is active and enabled on system startup
almirah@mira:~$ sudo ufw status
Status: active

To Action From
--
Apache Full ALLOW Anywhere
OpenSSH ALLOW Anywhere
Apache Full (v6) ALLOW Anywhere (v6)
OpenSSH (v6) ALLOW Anywhere (v6)
```

7. Gunakan perintah “hostname -I” untuk melihat ip address

```
almirah@mira:~$ hostname -I
10.1.41.66
almirah@mira:~$ _
```

8. Mengecek apache2 pada ip address



9. Masuk ke direktori

```
almirah@mira:~$ cd /var/www/html
almirah@mira:/var/www/html$ sudo mkdir tugas1
mkdir: cannot create directory 'tugas1': File exists
almirah@mira:/var/www/html$ sudo mkdir Tugas1
almirah@mira:/var/www/html$ sudo chmod 777 Tugas1
almirah@mira:/var/www/html$ cd Tugas1
almirah@mira:/var/www/html/Tugas1$
```

10. Mengedit

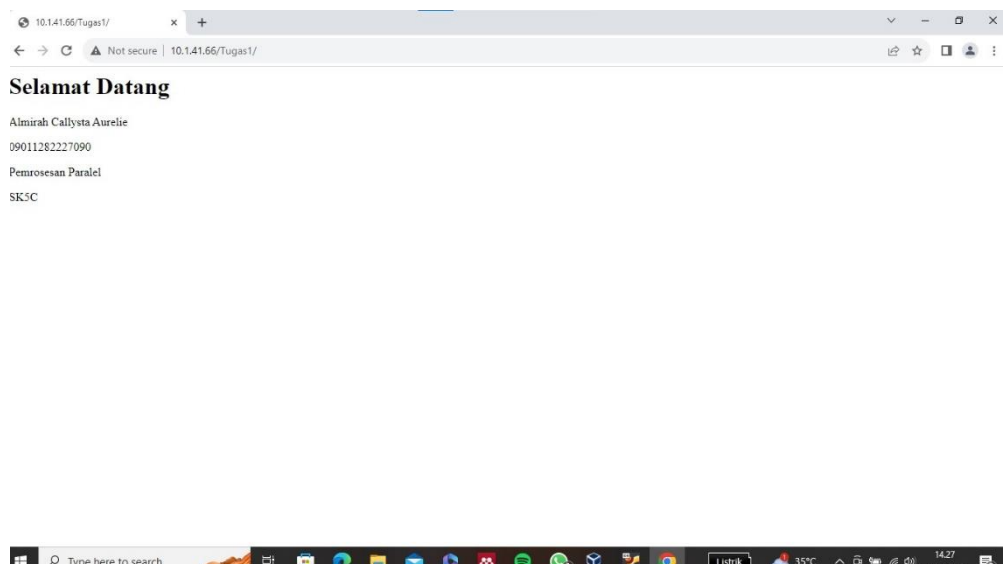
```
GNU nano 2.9.3 index.html Modified

<!doc html>
<html>

<head>
                                <h1> Selamat Datang </h1>
</head>

<body>
                                <p> Almirah Callysta Aurelie </p>
                                <p> 09011282227090 </p>
                                <p> Pemrosesan Paralel </p>
                                <p> SK5C </p>
</body>
</html>
```

11. Tampilan di website



- Remote ke CMD

1. Login ke dalam CMD dengan perintah “ssh user@ip address”

```
almirah@mira:~
Are you sure you want to continue connecting (yes/no/[fingerprint])? no
Host key verification failed.

C:\Users\user>ssh almirah@10.1.41.66
The authenticity of host '10.1.41.66 (10.1.41.66)' can't be established.
ECDSA key fingerprint is SHA256:5piRpJPcqoFEEg1kg44DCDKSWAWNRp1qSaN5f3RY.
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added '10.1.41.66' (ECDSA) to the list of known hosts.
almirah@10.1.41.66's password:
Welcome to Ubuntu 18.04.6 LTS (GNU/Linux 4.15.0-213-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

System information as of Wed Oct 25 07:33:01 UTC 2023

System load:  0.0          Processes:    93
Usage of /:   19.5% of 19.52GB   Users logged in: 1
Memory usage: 7%           IP address for enp0s3: 10.1.41.66
Swap usage:  0%

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
   just raised the bar for easy, resilient and secure K8s cluster deployment.

   https://ubuntu.com/engage/secure-kubernetes-at-the-edge

42 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

New release '20.04.6 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Oct 25 06:50:01 2023
almirah@mira: $
```

Sama seperti pengendalian pada ubuntu, kita dapat melakukan perintah perintah dasar pada command prompt

```
almirah@mira:~$ sudo apt update
[sudo] password for almirah:
Hit:1 http://id.archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://id.archive.ubuntu.com/ubuntu bionic-updates InRelease [88,7 kB]
Get:3 http://id.archive.ubuntu.com/ubuntu bionic-backports InRelease [83,3 kB]
Get:4 http://id.archive.ubuntu.com/ubuntu bionic-security InRelease [88,7 kB]
Fetched 261 kB in 1s (204 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
almirah@mira:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
apache2 is already the newest version (2.4.29-1ubuntu4.27).
0 upgraded, 0 newly installed, 0 to remove and 42 not upgraded.
almirah@mira:~$ cd Tugas1
-bash: cd: Tugas1: No such file or directory
almirah@mira:~$ cd /var/www/html
almirah@mira:/var/www/html$ cd Tugas1
almirah@mira:/var/www/html/Tugas1$ nano index.html
almirah@mira:/var/www/html/Tugas1$ almirah@mira:/var/www/html/Tugas1$
almirah@mira:/var/www/html/Tugas1$
```

```
almirah@mira: /var/www/html/Tugas1
GNU nano 2.9.3 index.html

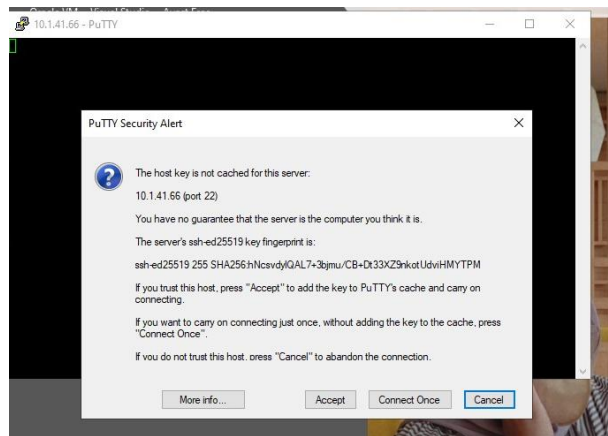
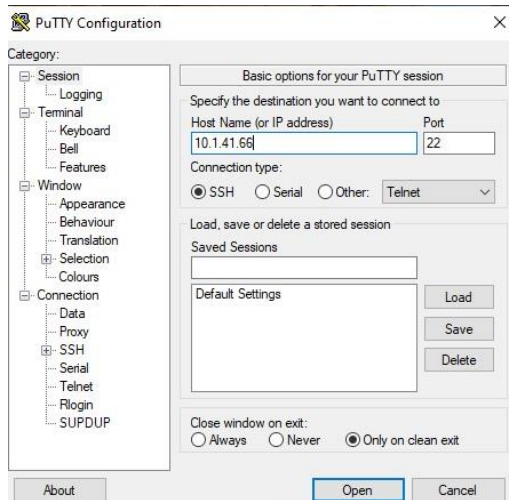
<!doc html>
<html>

<head>
<h1> Selamat Datang </h1>
</head>

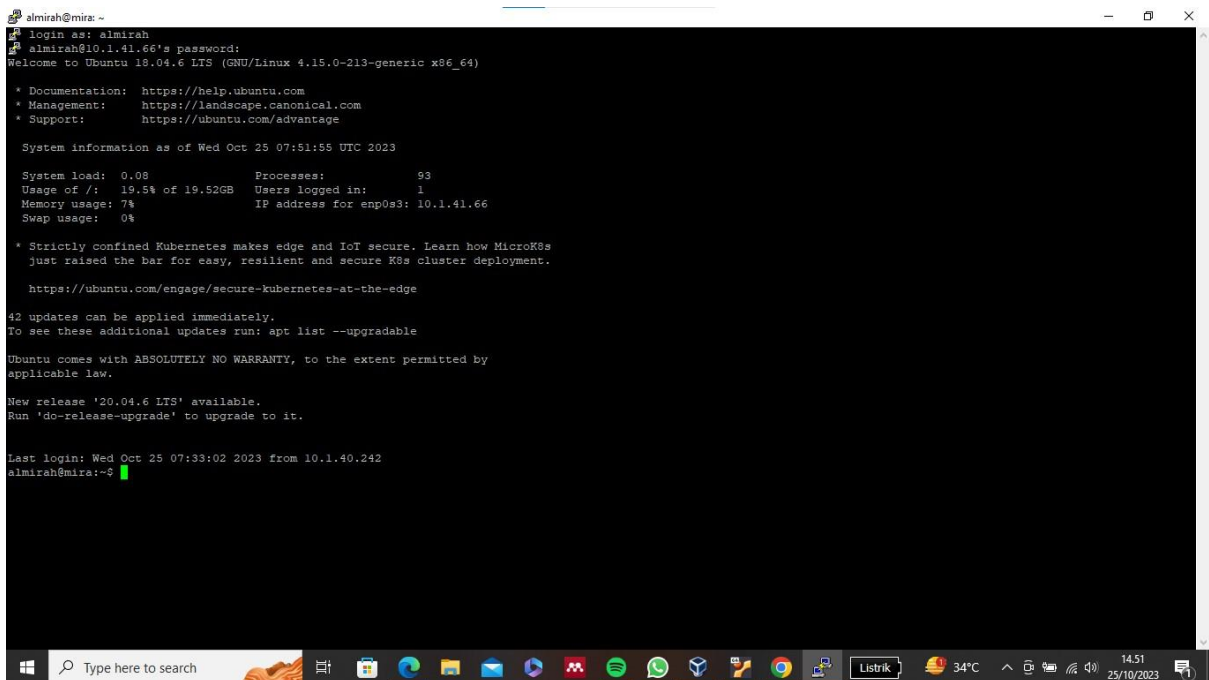
<body>
<p>Nama: Almirah Callysta Aurelie </p>
<p>NIM: 09011282227090 </p>
<p>Mata Kuliah: Pemrosesan Paralel </p>
<p>Kelas: SK5C </p>
</body>

</html>
```

- Remote ke PuTTY
 1. Input Hostname/IP address



2. Login ke puTTY



Sama seperti penjelasan sebelumnya, di puTTY pun kita dapat mengendalikan perintah dasar dengan command command yang ada.

```
almirah@mira: /var/www/html/Tugas1
login as: almirah
almirah@10.1.41.66's password:
Welcome to Ubuntu 18.04.6 LTS (GNU/Linux 4.15.0-213-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Wed Oct 25 07:51:55 UTC 2023

System load:  0.08           Processes:      93
Usage of /:   19.5% of 19.52GB Users logged in:     1
Memory usage: 7%            IP address for enp0s3: 10.1.41.66
Swap usage:   0%

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

42 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

New release '20.04.6 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Oct 25 07:33:02 2023 from 10.1.40.242
almirah@mira:~$ cd /var/www/html
almirah@mira:/var/www/html$ cd Tugas1
almirah@mira:/var/www/html/Tugas1$ nano index.html
almirah@mira:/var/www/html/Tugas1$
```

```
almirah@mira: /var/www/html/Tugas1
GNU nano 2.9.3 index.html

<doc html>
<html>

<head>
<h1> Selamat Datang </h1>
</head>

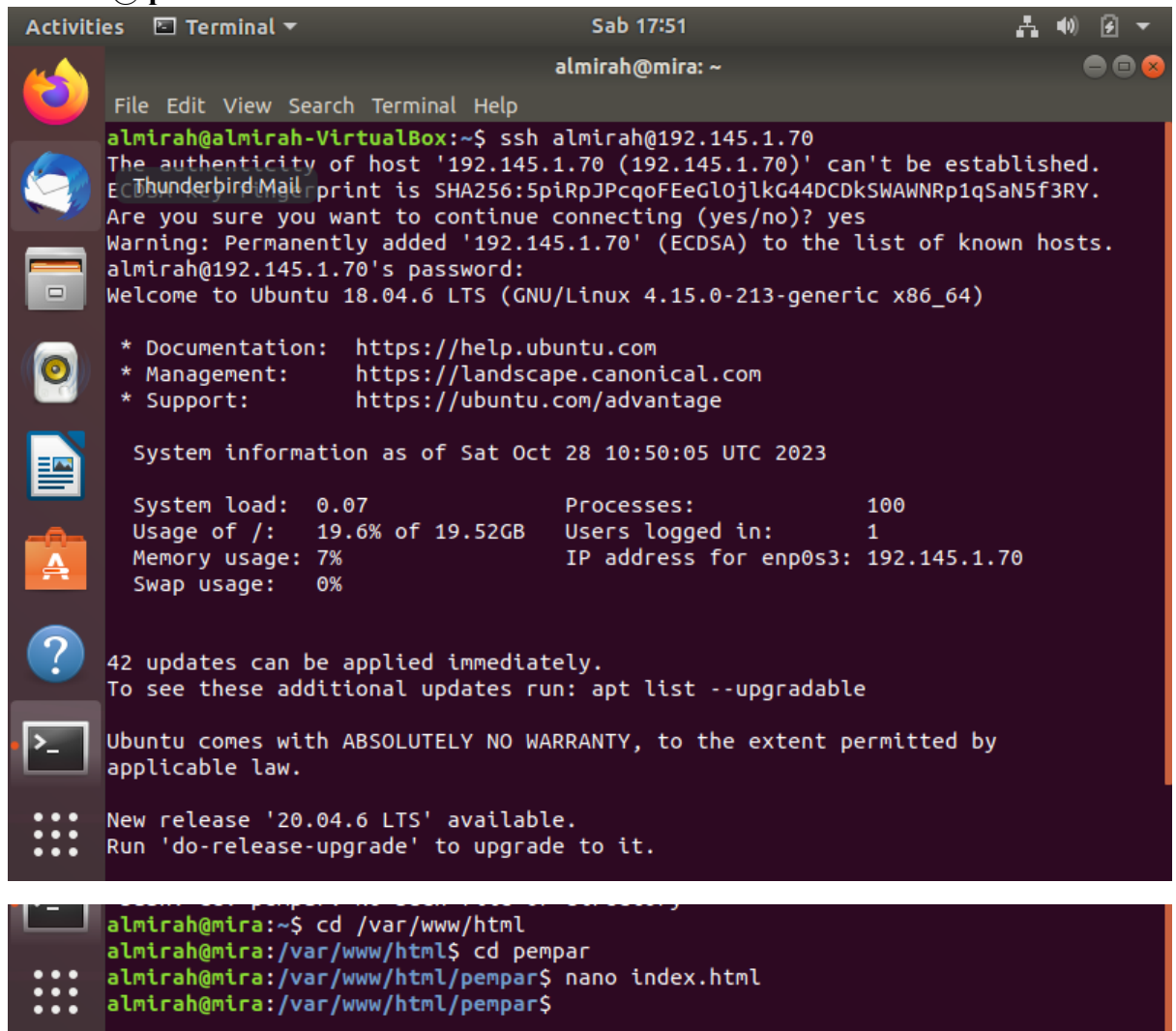
<body>
<p>Name: Almirah Callista Aurelie </p>
<p>NIM: 09011282227090 </p>
<p>Mata Kuliah: Pemrosesan Paralel </p>
<p>Kelas: SK5C </p>
</body>

</html>

[ Read 15 lines ]
Get Help  Write Out  Where Is  Cut Text  Justify  Cur Pos  M-U  Undo  M-A  Mark Text  M-I  To Bracket  M-^  Previous
Exit      Read File  Replace  Uncut Text  To Spell  Go To Line  M-B  Redo  M-C  Copy Text  M-W  WhereIs Next  M-V  Next
```

- Remote ke Ubuntu Desktop

1. Login ke ubuntu desktop dengan menggunakan command “ssh user@ip.address”



```
almirah@mira: ~
File Edit View Search Terminal Help
almirah@almirah-VirtualBox:~$ ssh almirah@192.145.1.70
The authenticity of host '192.145.1.70 (192.145.1.70)' can't be established.
ECDSA public key fingerprint is SHA256:5piRpJPcqeFEeGlojlkG44DCDkSWAWNRp1qSaN5f3RY.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.145.1.70' (ECDSA) to the list of known hosts.
almirah@192.145.1.70's password:
Welcome to Ubuntu 18.04.6 LTS (GNU/Linux 4.15.0-213-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

System information as of Sat Oct 28 10:50:05 UTC 2023

System load:  0.07               Processes:    100
Usage of /:   19.6% of 19.52GB   Users logged in: 1
Memory usage: 7%                IP address for enp0s3: 192.145.1.70
Swap usage:  0%

42 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

New release '20.04.6 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

almirah@mira:~$ cd /var/www/html
almirah@mira:/var/www/html$ cd pempar
almirah@mira:/var/www/html/pempar$ nano index.html
almirah@mira:/var/www/html/pempar$
```