



Linux Basics

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1. Pengantar Tentang Linux

Apa itu Linux?

- Blok bangunan dari Sistem Operasi GNU/Linux, dirilis pada tanggal 17 September 1991 oleh Linus Torvalds
- Android menggunakan Linux sebagai OS-nya, karena itu ia menjadi OS yang paling banyak diinstal di dunia
- 1 Kernel Linux, tetapi lebih dari satu Distribusi Linux (versi yang berbeda)
- Kernel Linux + perangkat lunak GNU = OS GNU/Linux
- Versi yang berbeda dari OS GNU/Linux = Distribusi Linux (atau disebut juga Distros)
- Distros yang umum: Ubuntu, Debian, Redhat, CentOS, Arch

Kenapa Belajar Linux?

- **Kontrol & Kustomisasi:** setiap bagian dari komputer dan sistem dapat disesuaikan dengan preferensi kalian
- **Alat CLI yang kuat:** Banyak alat yang membantu kalian menyesuaikan dan menavigasi sistem kalian, atau membantu kalian dengan alur kerja langsung melalui terminal (misalnya IDE seperti NeoVim), hanya dapat diakses melalui Command Line Interface (CLI)
- **Mayoritas komputer saat ini menjalankan Linux,** yang digunakan secara luas di server, jaringan, keamanan, dan lingkungan cloud di seluruh dunia

Global Server Operating System Market Share, By Operating System, 2024



2. *Command Line* Linux Dasar

Direktori Umum

/home – User files

/etc – Config files

/var – Logs

/usr – Software

Perintah Navigasi

Pendaftaran File:

ls # List

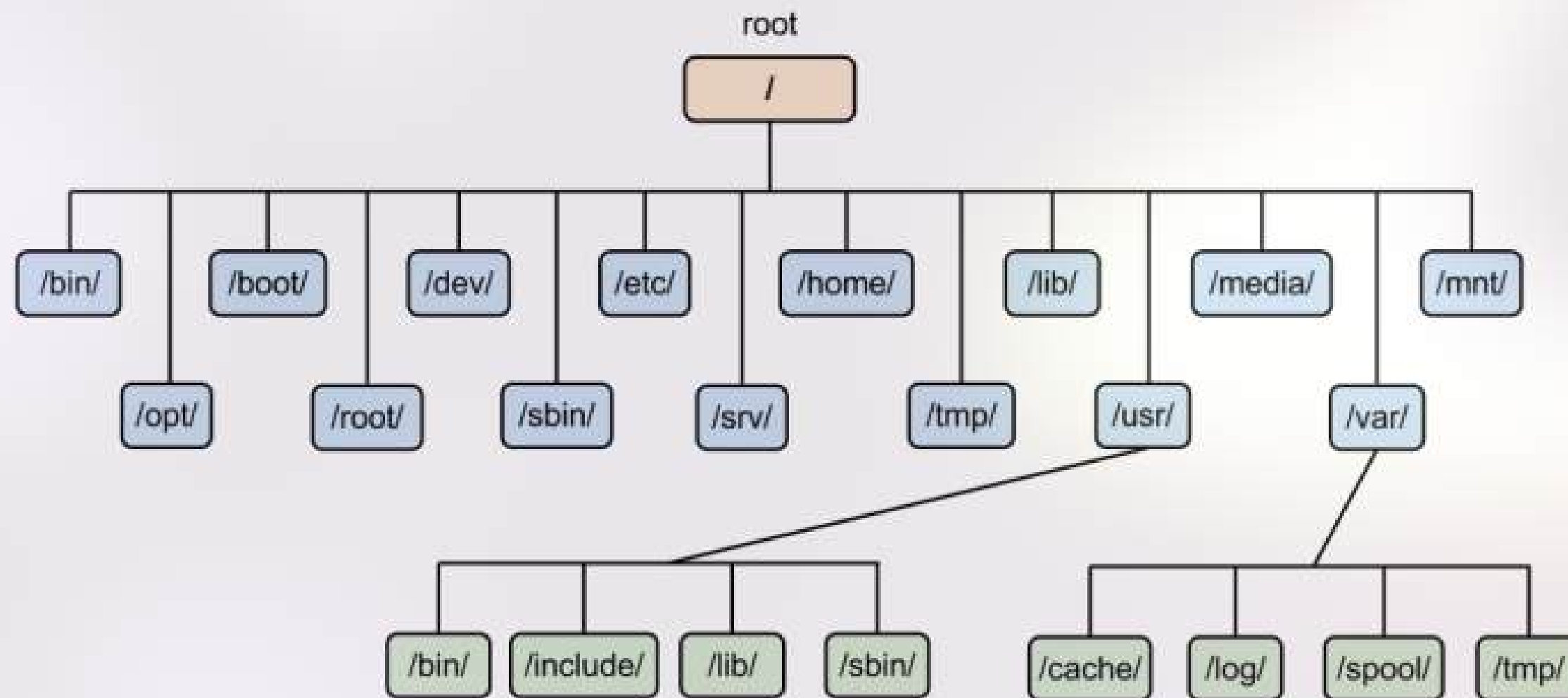
ls -l # Long list

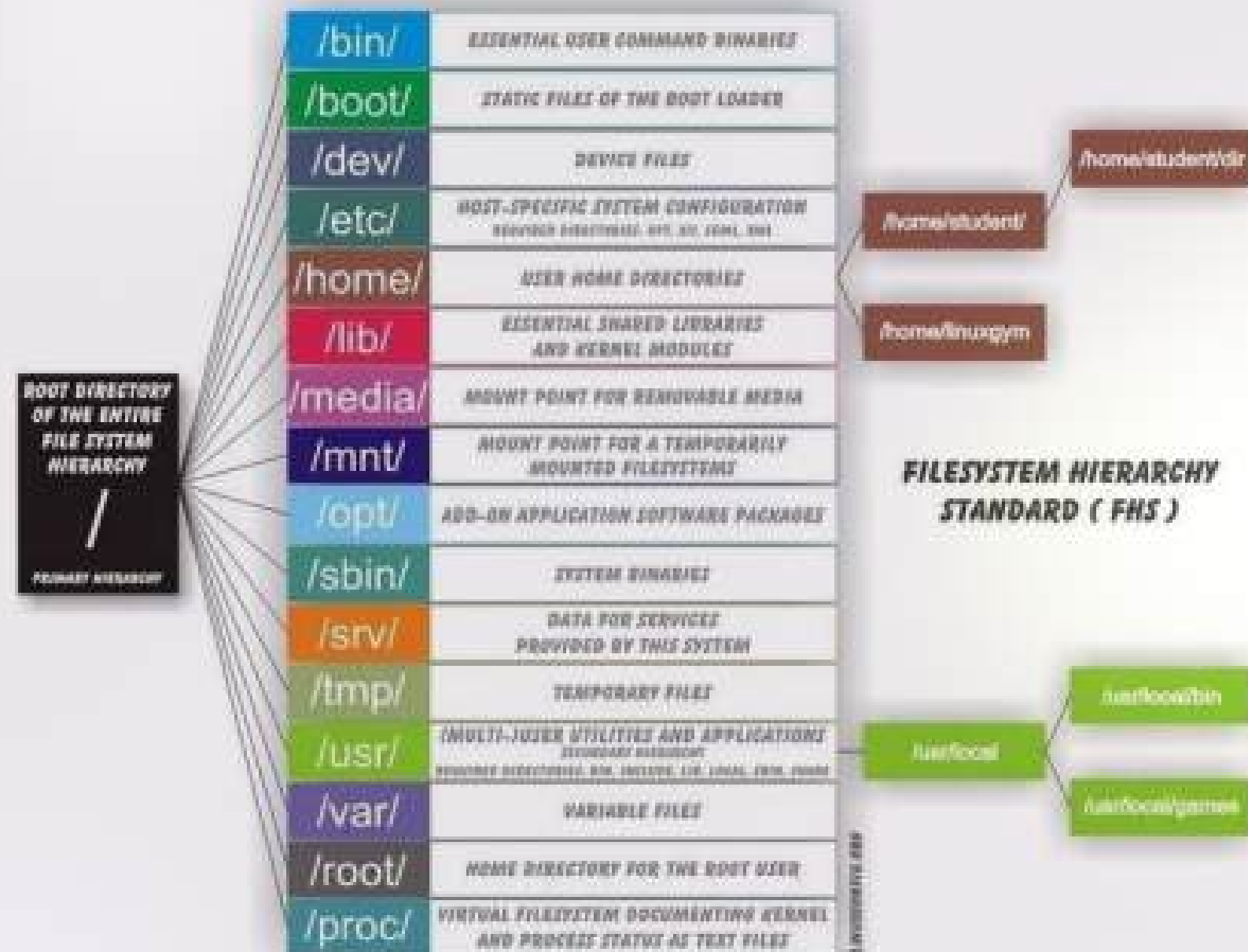
ls -a # Show hidden

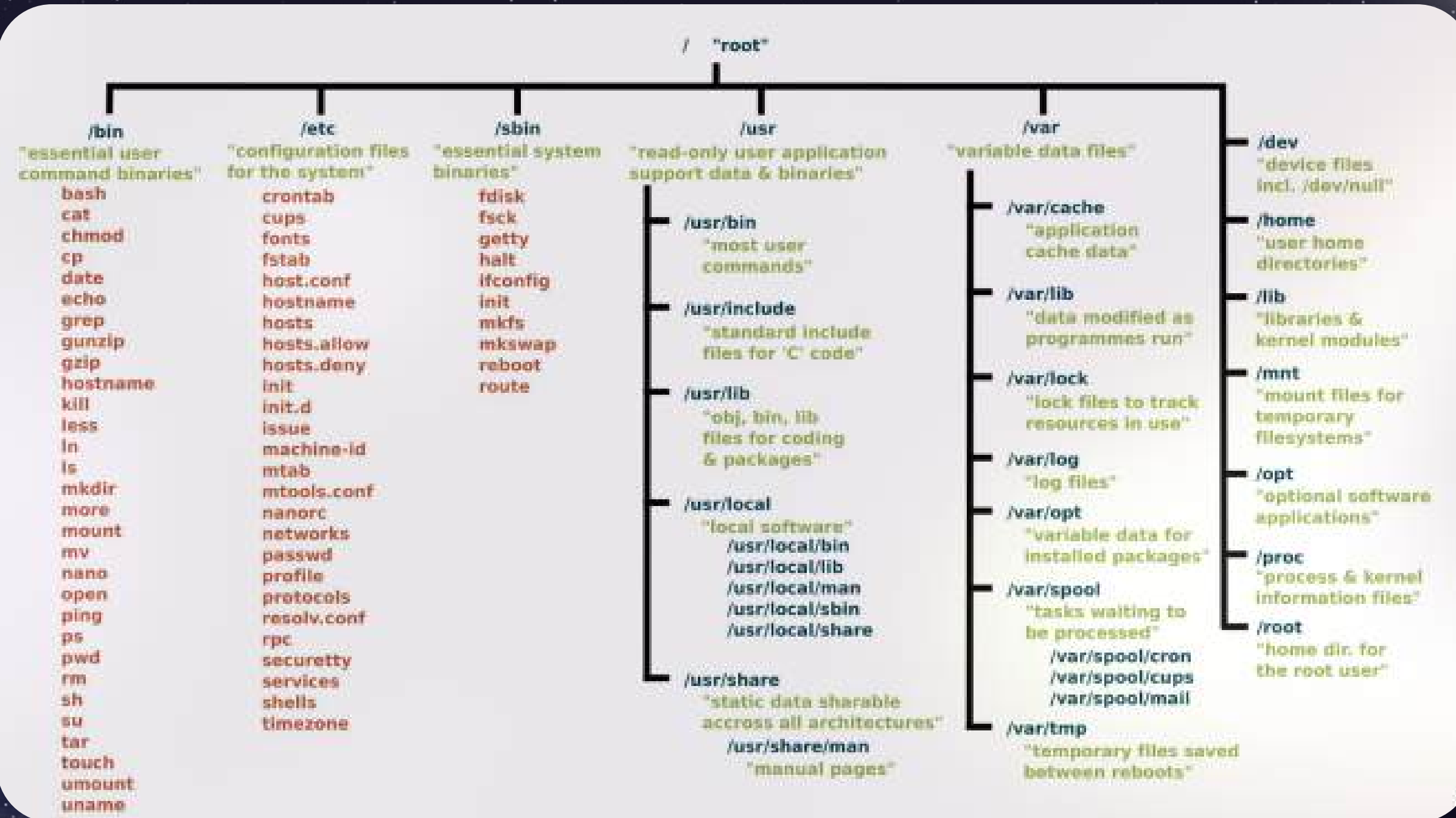
ls -lh # Human-readable

3. Operasi *File* & Direktori

Struktur *File* Linux







Menciptakan

touch file.txt

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ touch file.txt

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
file.txt
```

mkdir -p path/to/folder

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cd ~

(mshazaw@kali)-[~]
$ mkdir -p ~/OmahTIAcademy/Examples/Class1/folder2

(mshazaw@kali)-[~]
$ cd ~/OmahTIAcademy/Examples/Class1

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
file.txt  folder  folder2
```

mkdir folder

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ mkdir folder

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
file.txt  folder
```


Copy/Move/Delete

cp file.txt new.txt

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
file.txt

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cp file.txt new.txt

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
file.txt  new.txt
```

cp -r dir1 dir2

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
dir1  file.txt  new.txt

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cp -r dir1 dir2

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
dir1  dir2  file.txt  new.txt
```

mv file /tmp

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ touch file

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ mv file /tmp

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls /tmp
file
```

mv old new

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
old

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ mv old new

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
new
```


Copy/Move/Delete

rm -r folder

```
(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]
$ ls
file  folder

(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]
$ rm -r folder

(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]
$ ls
file
```

rm file

```
(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]
$ ls
file

(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]
$ rm file

(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]
$ ls
```


4. Manipulasi Teks

echo "Hi" > file.txt

echo "World" >> file.txt

cat file.txt

```
(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]  
$ ls  
file.txt
```

```
(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]  
$ echo "Hi" > file.txt
```

```
(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]  
$ echo "World" >> file.txt
```

```
(mshazaw@kali) - [~/OmahTIAcademy/Examples/Class1]  
$ cat file.txt  
Hi  
World
```



```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cat file.txt
Hi
World
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
```

head file.txt

tail -n 5 file.txt

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ head file.txt
Hi
World
1
2
3
4
5
6
7
8
```

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ tail -n 5 file.txt
11
12
13
14
15
```


Search & Filter

grep "pattern" file

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cat file
12
adsadas
211e
fQFR2Q
QF11RFQ
FQ2F1F
FQFR2
pattern=OmahTIAcademy
a3wdf3
q2wesf
faavf
32Xyrf3q
```

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ grep "pattern" file
pattern=OmahTIAcademy
```

cut -d":" -f1/etc/passwd

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cat passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
sshd:x:103:65534::/run/sshd:/usr/sbin/nologin
alice:x:1000:1000:Alice Smith,Room 101,555-1234,:/home/alice:/bin/bash
bob:x:1001:1001:Bob Johnson,,:/home/bob:/bin/bash
charlie:x:1002:1002:Charlie Brown,,:/home/charlie:/bin/zsh
david:x:1003:1003:David Williams,IT Dept,,:/home/david:/bin/bash
eve:x:1004:1005:Eve Torres,Marketing,,:/home/eve:/bin/sh
frank:x:1005:1005:Frank Miller,,:/home/frank:/bin/bash
:Usually located in /etc/passwd inside real linux environments

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cut -d":" -f1 passwd
root
daemon
www-data
sshd
alice
bob
charlie
david
eve
frank
```


Search & Filter

sort file | uniq -c

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cat file
Muhammad
Muhammad
Naufal
Adam
Bayu
Farhan
Yusuf
Bayu
Yusuf
Ken
```

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ sort file | uniq -c
  1 Adam
  2 Bayu
  1 Farhan
  1 Ken
  2 Muhammad
  1 Naufal
  2 Yusuf
```

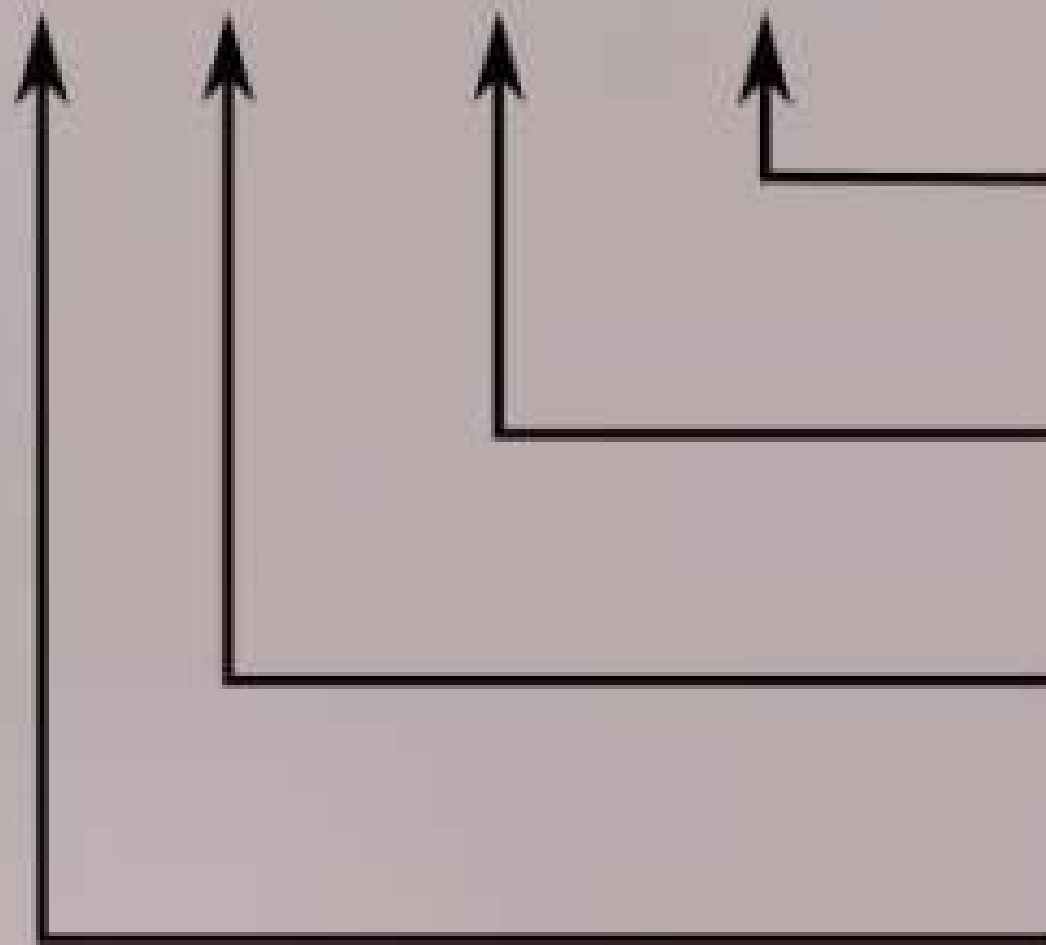
cut -d":" -f1/etc/passwd

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ cat file
Muhammad
Muhammad
Naufal
Adam
Bayu
Farhan
Yusuf
Bayu
Yusuf
Ken
```

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ wc -l file
10 file
```


5. Izin & Kepemilikan *File*

- rwxrwxrwx



Read, write, and execute permissions for all other users.

Read, write, and execute permissions for the group owner of the file.

Read, write, and execute permissions for the file owner.

File type:
- indicates regular file
d indicates directory

Melihat Hak Akses (View Permissions):

- `ls -l file` – Menampilkan informasi detail dari file dalam format daftar panjang, terutama untuk melihat hak akses (izin), pemilik, dan grup dari file tersebut.

Mengubah Hak Akses (Change Permissions):

- `chmod u+x script.sh` – Memberikan (+) hak akses untuk eksekusi (x) hanya kepada pemilik file (u), sehingga `script.sh` bisa dijalankan oleh pemiliknya.
- `chmod 755 script.sh` – Mengubah hak akses `script.sh` menjadi 755: pemilik bisa membaca, menulis, & eksekusi; sedangkan grup dan pengguna lain hanya bisa membaca & eksekusi.

Mengubah Kepemilikan (Change Ownership):

- `chown user file` – Mengubah kepemilikan (owner) dari sebuah file menjadi milik user yang ditentukan.
- `chgrp group file` – Mengubah kepemilikan grup dari sebuah file menjadi milik group yang ditentukan.
- `chown user.group file` – Mengubah pemilik file menjadi user dan grupnya menjadi group secara bersamaan dalam satu perintah. (Catatan: Sintaks yang umum menggunakan titik dua :)

6. Pengelolaan Pengguna & Grup

Membuat

Membuat (Create):

- `useradd -m user` - Perintah ini membuat sebuah akun pengguna baru dengan nama user. Opsi `-m` memastikan direktori home (`/home/user`) juga ikut dibuat secara otomatis.
- `passwd user` - Digunakan untuk mengatur atau mengubah kata sandi (password) untuk akun user. Setelah dijalankan, Anda akan diminta untuk memasukkan password baru untuk pengguna tersebut.
- `groupadd group` - Perintah ini berfungsi untuk membuat sebuah grup pengguna baru dengan nama group di dalam sistem.

Memodifikasi (Modify):

- `usermod -aG sudo user` - Perintah ini menambahkan (`-aG`) akun user ke dalam grup sudo. Keanggotaan dalam grup sudo memberikan pengguna tersebut hak akses administratif (root) untuk menjalankan perintah-perintah penting.
- `userdel -r user` - Perintah ini menghapus total akun user dari sistem. Opsi `-r` memastikan direktori home milik pengguna tersebut beserta seluruh isinya juga ikut dihapus secara permanen.

7. Manajemen Paket (Debian/Ubuntu)

- `apt update` - Perintah ini berfungsi untuk menyinkronkan daftar paket di komputermu dengan server, guna mendapatkan informasi terbaru tentang versi software dan patch keamanan yang tersedia.
- `apt upgrade` - Setelah menjalankan update, perintah ini akan mengunduh dan menginstal versi terbaru dari semua software yang sudah ada di sistemmu, termasuk update keamanan yang penting.
- `apt install htop` - Perintah ini digunakan untuk mengunduh dan memasang aplikasi baru (dalam contoh ini `htop`) beserta semua file lain (dependensi) yang dibutuhkannya agar bisa berjalan dengan benar.
- `apt remove htop` - Perintah ini akan mencopot pemasangan aplikasi `htop` dari sistem, namun biasanya masih menyisakan file konfigurasi. Gunakan `apt purge` untuk menghapus aplikasi beserta semua konfigurasinya secara total.

8. Pengarsipan & Kompresi


```
tar -cvf archive.tar folder/  
gzip file.txt
```

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ ls  
file.txt  folder  
  
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ tar -cvf archive.tar folder/  
folder/  
folder/passwd  
folder/cat  
folder/files  
folder/treasure  
  
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ gzip file.txt  
  
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ ls  
archive.tar  file.txt.gz  folder
```

```
gunzip file.txt.gz  
tar -xvzf archive.tar.gz
```

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ ls  
archive.tar  file.txt.gz  
  
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ gunzip file.txt.gz  
  
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ tar -xvzf archive.tar.gz  
folder/  
folder/passwd  
folder/cat  
folder/files  
folder/treasure  
  
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ ls  
archive.tar  file.txt  folder  
  
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]  
$ ls folder/  
cat  files  passwd  treasure
```


9. Perintah *Networking*

ifconfig

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ifconfig
br-8477e0d80119: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 172.18.0.1 netmask 255.255.0.0 broadcast 172.18.255.255
    ether 02:42:ca:3a:7c:7a txqueuelen 0 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 8 overruns 0 carrier 0 collisions 0

docker0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 172.17.0.1 netmask 255.255.0.0 broadcast 172.17.255.255
    ether 02:42:48:25:fb:94 txqueuelen 0 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 8 overruns 0 carrier 0 collisions 0

eth0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether d8:43:ae:39:19:a8 txqueuelen 1000 (Ethernet)
    RX packets 176 bytes 15305 (14.9 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1479 bytes 123737 (120.8 KiB)
    TX errors 0 dropped 8 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 4192 bytes 338859 (330.9 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4192 bytes 338859 (330.9 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.18.46 netmask 255.255.255.0 broadcast 192.168.18.255
    inet6 fe80::e86a:cad:326d:b665 prefixlen 64 scopeid 0<link>
    ether 60:45:2e:c1:14:e3 txqueuelen 1000 (Ethernet)
    RX packets 1112160 bytes 540479201 (515.4 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 236226 bytes 97052149 (92.5 MiB)
    TX errors 0 dropped 18 overruns 0 carrier 0 collisions 0
```

ip a

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: eth0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state DOWN group default qlen 1000
    link/ether d8:43:ae:39:19:a8 brd ff:ff:ff:ff:ff:ff
3: wlan0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
    link/ether 60:45:2e:c1:14:e3 brd ff:ff:ff:ff:ff:ff
    inet 192.168.18.46/24 brd 192.168.18.255 scope global dynamic noprefixroute wlan0
        valid_lft 80931sec preferred_lft 80931sec
    inet6 fe80::e86a:cad:326d:b665/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
4: br-8477e0d80119: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether 02:42:ca:3a:7c:7a brd ff:ff:ff:ff:ff:ff
    inet 172.18.0.1/16 brd 172.18.255.255 scope global br-8477e0d80119
        valid_lft forever preferred_lft forever
5: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether 02:42:48:25:fb:94 brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
        valid_lft forever preferred_lft forever
```


ping google.com

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ping google.com
PING google.com (142.250.70.142) 56(84) bytes of data:
64 bytes from mel04s01-in-f14.1e100.net (142.250.70.142): icmp_seq=1 ttl=116 time=3.01 ms
64 bytes from mel04s01-in-f14.1e100.net (142.250.70.142): icmp_seq=2 ttl=116 time=4.68 ms
64 bytes from mel04s01-in-f14.1e100.net (142.250.70.142): icmp_seq=3 ttl=116 time=4.39 ms
64 bytes from mel04s01-in-f14.1e100.net (142.250.70.142): icmp_seq=4 ttl=116 time=3.66 ms
64 bytes from mel04s01-in-f14.1e100.net (142.250.70.142): icmp_seq=5 ttl=116 time=4.36 ms
^C
  google.com ping statistics —
5 packets transmitted, 5 received, 0% packet loss, time 4008ms
rtt min/avg/max/mdev = 3.011/4.021/4.679/0.606 ms
```

curl https://www.google.com

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ curl https://www.google.com
<!doctype html><html itemscope="" itemtype="http://schema.org/WebPage" lang="en-AU"><head><meta content="text/html; charset=UTF-8" http-equiv="Content-Type"><meta content="/images/branding/googleg/1x/googleg_standard_color_128dp.png" itemprop="image"><title>Google</title><script nonce="vFJ3HiIMjFbTcEyogUzgow">(function(){var _g={kEI:'wjVhaPmDQqjg0PEPwf-buQk',kEXPI:'0,202792,25,37,2,610014,2887431,138,503,442,538661,14111,34680,30022,6397,354504,290044,15671,5226011,36812642,25228681,117307,20961,14125,65154,6756,23879,9138,4600,328,6225,64165,15048,8221,7411,30379,28334,10903,37384,4666,1259,352,4100,6951,7829,5870,3100,758,3856,5773,13482,11468,6,2656,16524,3261,2990,35,3420,2863,1,2674,2407,2331,3208,2819,1345,2551,5392,658,1932,1116,1977,3604,5658,4,7485,2862,1763,3358,5804,114,1202,3,3507,822,3822,648,4215,9,4,1506,541,1511,1253,1922,486,1,3873,1487,250,1857,1,2977,1,2970,497,2,78,817,399,1221,539,4,640,482,7,487,891,601,1032,1578,1913,3612,2044,3,262,3017,423,941,931,1455,2646,103,4,1,266,55,4891,4,5,202,245,2,420,31,3,1322,290,694,7,8,147,2885,1654,92,1854,772,472,1446,3,2,2,2,601,730,483,31,178,1296,1634,131,557,611,4,106,347,381,383,1029,479,371,1508,494,712,601,4590,518,116,528,116,1557,190,98,1280,590,3,29,869,482,31,84,20,771,90,358,549,24,24,24,168,101,961,965,1122,141,438,699,103,717,608,5,218,378,336,565,2,344,14,25,98,2,2,310,4,483,438,357,79,49,267,149,23,156,106,212,15,158,498,169,56,827,3,409,227,562,740,26,42,302,482,835,215,298,6,620,576,182,36,106,40,59,2062,9,1,450,1358,887,62,491,974,13,59,661,2,508,276,12,13,278,619,23,266,701,6,114,135,326,232,70,1945,2,2463,21235587,5,2992,4,2434,526,3,1272,36,167,1175,1683,15,711,3432,2,1472,264,77,2194,3,538,181,135,1133,1072,3629254,2391430,2473307,474940',kBL:'HYe-',kOPI:89978449};(function(){var a;((a=window.google)=null?0:a.stvsc)?google.kEI=g.kEI:window.google=_g;}).call(this);})();(function(){google.sn='webhp';google.kHL='en-AU';})();(function(){var g=this||self;function k(){return window.google&&window.google.kOPI||null};var l,m=[];function n(a){for(var b;a&&(!a.getAttribute||!(b=a.getAttribute("eid"))));)a=a.parentNode;return b||l}function p(a){for(var b=null;a&&(b=a.getAttribute||!(b=a.getAttribute("leid"))));)a=a.parentNode;return b}function q(a){/^http/i.test(a)&&window.location.protocol==="https:"&&(google.ml&&google.ml(Error("a"),!1,{src:a,glmm:1}),a="");return a}function r(a,b,d,c,h){var e="";b.search("&ei=")===-1&&(e="&ei="+n(c),b.search("&lei=")===-1&&(c=p(c))&&(e+="&l"/>
```

wget https://google.com

```
(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ wget https://google.com
--2025-06-29 19:43:51-- https://google.com/
Resolving google.com (google.com)... 142.250.70.142, 2404:6800:4015:803::200e
Connecting to google.com (google.com)|142.250.70.142|:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://www.google.com/ [following]
--2025-06-29 19:43:52-- https://www.google.com/
Resolving www.google.com (www.google.com)... 142.250.70.132, 2404:6800:4015:800::2004
Connecting to www.google.com (www.google.com)|142.250.70.132|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [text/html]
Saving to: 'index.html'

index.html           [  =>  ] 16.99K --.-KB/s  in 0.003s

2025-06-29 19:43:52 (4.95 MB/s) - 'index.html' saved [17401]

(mshazaw@kali)-[~/OmahTIAcademy/Examples/Class1]
$ ls
index.html
```


10. Manajemen Proses

`ps aux` – Menampilkan daftar lengkap semua proses yang sedang berjalan di sistem pada saat itu juga, termasuk proses milik pengguna lain dan yang berjalan di latar belakang.

`Top` – Membuka dashboard interaktif untuk memonitor proses dan penggunaan resource sistem (CPU & Memori) secara real-time.

`kill 1234` – Mengirim sinyal untuk menghentikan sebuah proses secara paksa berdasarkan nomor Process ID (PID) nya, dalam contoh ini adalah 1234.

`nice -n 10 command` – Menjalankan sebuah perintah dengan prioritas CPU yang lebih rendah, sehingga 'mengalah' dan tidak akan mengganggu proses lain yang lebih penting.

11. Perintah Bantuan

`man command` – Perintah ini menampilkan halaman manual lengkap untuk sebuah perintah. Ini adalah cara paling detail untuk mempelajari semua opsi, cara kerja, dan contoh penggunaan sebuah perintah (misalnya, `man ls`).

`command --help` – Menampilkan ringkasan bantuan yang cepat dan singkat langsung dari perintah itu sendiri. Ini biasanya lebih ringkas daripada `man` dan bagus untuk sekadar mengingat opsi yang ada (misalnya, `ls --help`).

`apropos [kata_kunci]` – Perintah ini digunakan untuk mencari perintah lain yang relevan berdasarkan deskripsi singkatnya. Sangat berguna jika Anda tahu apa yang ingin dilakukan tapi tidak tahu nama perintahnya (misalnya, `apropos 'copy file'`).

`history` – Menampilkan daftar riwayat perintah yang pernah Anda ketik sebelumnya. Anda bisa menggabungkannya dengan `grep` untuk mencari perintah spesifik yang lupa tapi pernah Anda gunakan (misalnya, `history | grep 'chmod'`).

Challenges Tambahan/Latihan

PicoCTF:

- > convertme.py
- > Codebook
- > First Find
- > Big Zip
- > strings it
- > Wave a flag

Bandit OverTheWire:

Level 0

Level 0 – > Level 1

Level 1 – > Level 2

Level 2 – > Level 3

Level 3 – > Level 4

Level 4 – > Level 5

Level 5 – > Level 6

Terima Kasih Semua