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TRPL1B

W2. PERCOBAAN & LATIHAN

A. Linux (Terminal)

Percobaan 1: Mengetahui Informasi Sistem

1. Buka terminal Linux.
2. Jalankan perintah berikut dan catat hasilnya:

- o `uname -a`

```
capa@capa:~$ uname -a
Linux capa 6.8.0-55-generic #57-Ubuntu SMP PREEMPT_DYNAMIC Wed Feb 12 23:42:21 UTC 2025 x86_64 x86_64 x86_64 GNU/Linux
```

- o `lsb_release -a`

```
capa@capa:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 24.04.2 LTS
Release:        24.04
Codename:       noble
```

- o `df -h`

```
capa@capa:~$ df -h
Filesystem          Size  Used Avail Use% Mounted on
tmpfs                197M  1.1M  196M   1% /run
/dev/mapper/ubuntu--vg-ubuntu--lv 12G   4.5G   6.2G  43% /
tmpfs                984M    0   984M   0% /dev/shm
tmpfs                5.0M    0   5.0M   0% /run/lock
/dev/sda2            2.0G   96M   1.7G   6% /boot
tmpfs                197M   12K  197M   1% /run/user/1000
```

- o `free -h`

```
capa@capa:~$ free -h
               total        used        free      shared  buff/cache   available
Mem:           1.9Gi        326Mi        1.2Gi         1.1Mi        563Mi        1.6Gi
Swap:          2.0Gi           0B          2.0Gi
```

3. Jelaskan apa yang ditampilkan oleh masing-masing perintah.

uname -a

Menampilkan informasi sistem lengkap, termasuk:

- Nama kernel (Linux)
- Nama host (nama komputer)
- Versi kernel & tanggal kompilasi
- Arsitektur sistem (32-bit/64-bit)

lsb_release -a

Menampilkan informasi distribusi Linux, seperti:

- Nama distribusi (Ubuntu, Debian, dll.)
- Versi OS
- Kode nama rilis

df -h

Menampilkan penggunaan ruang disk dalam format yang mudah dibaca:

- Total kapasitas disk
- Kapasitas yang digunakan
- Kapasitas yang tersisa
- Lokasi mount dari setiap partisi

free -h

Menampilkan penggunaan RAM & swap dalam format mudah dibaca:

- Total RAM yang tersedia
- RAM yang sedang digunakan
- RAM yang tersisa
- Penggunaan swap (memori virtual)

Percobaan 2: Pengelolaan File dan Direktori

1. Buat direktori baru dengan nama praktikum_linux menggunakan perintah mkdir.
2. Masuk ke direktori tersebut menggunakan perintah cd.

3. Buat file kosong bernama file1.txt menggunakan perintah touch.
4. Salin file tersebut ke nama file2.txt menggunakan perintah cp.
5. Hapus file1.txt menggunakan perintah rm.
6. Tampilkan isi direktori menggunakan perintah ls.

```
capa@capa:~$ mkdir Pratikum_Linux
capa@capa:~$ cd
capa@capa:~$ cd Pratikum_Linux
capa@capa:~/Pratikum_Linux$ touch file.txt
capa@capa:~/Pratikum_Linux$ touch file.txt cp file2.txt
capa@capa:~/Pratikum_Linux$ cp file1.txt file2.txt
cp: cannot stat 'file1.txt': No such file or directory
capa@capa:~/Pratikum_Linux$ cp file.tx file2.txt
cp: cannot stat 'file.tx': No such file or directory
capa@capa:~/Pratikum_Linux$ cp file.txt file2.txt
capa@capa:~/Pratikum_Linux$ rm file.txt
capa@capa:~/Pratikum_Linux$ ls
cp file2.txt
capa@capa:~/Pratikum_Linux$
```

Percobaan 3: Mencari File dan Direktori

1. Cari file file2.txt di dalam direktori praktikum_linux menggunakan perintah find.
 - o Contoh: find ~/praktikum_linux -name file2.txt
2. Buat file baru bernama contoh.txt dan tambahkan teks "Ini adalah contoh teks" ke dalamnya.
3. Cari teks "contoh" dalam file contoh.txt menggunakan perintah grep.
 - o Contoh: grep "contoh" contoh.txt

```
capa@capa:~/Pratikum_Linux$ find ~/Pratikum_Linux -name file2.txt
/home/capa/Pratikum_Linux/file2.txt
capa@capa:~/Pratikum_Linux$ echo "ini adalah contoh teks">contoh.txt
capa@capa:~/Pratikum_Linux$ grep "contoh" contoh.txt
ini adalah contoh teks
capa@capa:~/Pratikum_Linux$
```

Percobaan 4: Melihat Format Perintah

1. Gunakan perintah man untuk melihat manual dari perintah ls.
 - o Contoh: man ls

```

LS(1)                                     User Commands                               LS(1)

NAME
  ls - list directory contents

SYNOPSIS
  ls [OPTION]... [FILE]...

DESCRIPTION
  List information about the FILES (the current directory by default). Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

  Mandatory arguments to long options are mandatory for short options too.

  -a, --all
      do not ignore entries starting with .

  -A, --almost-all
      do not list implied . and ..

  --author
      with -l, print the author of each file

  -b, --escape
      print C-style escapes for nongraphic characters

  --block-size=SIZE
      with -l, scale sizes by SIZE when printing them; e.g., '--block-size=M'; see SIZE format below

  -B, --ignore-backups
      do not list implied entries ending with ~

  -c      with -lt: sort by, and show, ctime (time of last change of file status information); with -l: show ctime and sort by name; otherwise: sort by
          ctime, newest first

  -C      list entries by columns

  --color[=WHEN]
      color the output WHEN; more info below

  -d, --directory
      list directories themselves, not their contents

  -D, --dired
      generate output designed for Emacs' dired mode

  -f      list all entries in directory order

  -F, --classify[=WHEN]
      append indicator (one of */=>@|) to entries WHEN

```

Manual page ls(1) line 1 (press h for help or q to quit)

2. Gunakan opsi --help untuk melihat bantuan singkat dari perintah cp.

- Contoh: `cp --help`

```
-x, --one-file-system    stay on this file system
-Z                        set SELinux security context of destination
                           file to default type
--context[=CTX]          like -Z, or if CTX is specified then set the
                           SELinux or SMACK security context to CTX
--help                   display this help and exit
--version                 output version information and exit
```

ATTR_LIST is a comma-separated list of attributes. Attributes are 'mode' for permissions (including any ACL and xattr permissions), 'ownership' for user and group, 'timestamps' for file timestamps, 'links' for hard links, 'context' for security context, 'xattr' for extended attributes, and 'all' for all attributes.

By default, sparse SOURCE files are detected by a crude heuristic and the corresponding DEST file is made sparse as well. That is the behavior selected by --sparse=auto. Specify --sparse=always to create a sparse DEST file whenever the SOURCE file contains a long enough sequence of zero bytes. Use --sparse=never to inhibit creation of sparse files.

UPDATE controls which existing files in the destination are replaced. 'all' is the default operation when an --update option is not specified, and results in all existing files in the destination being replaced. 'none' is similar to the --no-clobber option, in that no files in the destination are replaced, but also skipped files do not induce a failure. 'older' is the default operation when --update is specified, and results in files being replaced if they're older than the corresponding source file.

When --reflink[=always] is specified, perform a lightweight copy, where the data blocks are copied only when modified. If this is not possible the copy fails, or if --reflink=auto is specified, fall back to a standard copy. Use --reflink=never to ensure a standard copy is performed.

The backup suffix is '~', unless set with --suffix or SIMPLE_BACKUP_SUFFIX. The version control method may be selected via the --backup option or through the VERSION_CONTROL environment variable. Here are the values:

```
none, off               never make backups (even if --backup is given)
numbered, t             make numbered backups
existing, nil            numbered if numbered backups exist, simple otherwise
simple, never            always make simple backups
```

As a special case, cp makes a backup of SOURCE when the force and backup options are given and SOURCE and DEST are the same name for an existing, regular file.

GNU coreutils online help: <<https://www.gnu.org/software/coreutils/>>
Full documentation <<https://www.gnu.org/software/coreutils/cp>>
or available locally via: info '(coreutils) cp invocation'
capa@capa:~/Pratikum Linux\$

B. Command Prompt Windows

Percobaan 1: Mengetahui Informasi Sistem

1. Buka Command Prompt.
2. Jalankan perintah berikut dan catat hasilnya:
 - Systeminfo

```

Host Name: CAPAAA
OS Name: Microsoft Windows 11 Home Single Language
OS Version: 10.0.22631 N/A Build 22631
OS Manufacturer: Microsoft Corporation
OS Configuration: Standalone Workstation
OS Build Type: Multiprocessor Free
Registered Owner: partono_kyb@outlook.com
Registered Organization: N/A
Product ID: 00327-35932-43976-AAOEM
Original Install Date: 05/02/2023, 22.46.49
System Boot Time: 11/03/2025, 05.23.01
System Manufacturer: LENOVO
System Model: 82KT
System Type: x64-based PC
Processor(s): 1 Processor(s) Installed.
               [01]: AMD64 Family 23 Model 104 Stepping 1 AuthenticAMD ~1801 Mhz
BIOS Version: LENOVO GLCN46WW, 29/04/2022
Windows Directory: C:\WINDOWS
System Directory: C:\WINDOWS\system32
Boot Device: \Device\HarddiskVolume1
System Locale: en-us;English (United States)
Input Locale: en-us;English (United States)
Time Zone: (UTC+07:00) Bangkok, Hanoi, Jakarta
Total Physical Memory: 6.006 MB
Available Physical Memory: 587 MB
Virtual Memory: Max Size: 24.438 MB
Virtual Memory: Available: 7.547 MB
Virtual Memory: In Use: 16.891 MB
Page File Location(s): C:\pagefile.sys
Domain: WORKGROUP
Logon Server: \\CAPAAA
Hotfix(s): 6 Hotfix(s) Installed.
            [01]: KB5049624
            [02]: KB5012170
            [03]: KB5027397
            [04]: KB5052094
            [05]: KB5053488
            [06]: KB5052107
Network Card(s): 3 NIC(s) Installed.

```

```

            [01]: KB5049624
            [02]: KB5012170
            [03]: KB5027397
            [04]: KB5052094
            [05]: KB5053488
            [06]: KB5052107
Network Card(s): 3 NIC(s) Installed.
                 [01]: Realtek 8822CE Wireless LAN 802.11ac PCI-E NIC
                   Connection Name: Wi-Fi
                   DHCP Enabled: Yes
                   DHCP Server: 10.5.0.63
                   IP address(es)
                   [01]: 10.1.45.161
                   [02]: fe80::73a6:34fb:9765:c4e4
                 [02]: Bluetooth Device (Personal Area Network)
                   Connection Name: Bluetooth Network Connection
                   Status: Media disconnected
                 [03]: VirtualBox Host-Only Ethernet Adapter
                   Connection Name: Ethernet 2
                   DHCP Enabled: No
                   IP address(es)
                   [01]: 192.168.56.1
                   [02]: fe80::e270:3f52:3eb7:e97a
Hyper-V Requirements: A hypervisor has been detected. Features required for Hyper-V will not be displayed.
C:\Users\Lenovo>

```

- wmic os get caption,version

```

C:\Users\Lenovo> wmic os get caption,version
Caption                                Version
Microsoft Windows 11 Home Single Language 10.0.22631

```

- wmic memorychip get capacity

```
C:\Users\Lenovo>wmic memorychip get capacity
Capacity
4294967296
4294967296
```

- wmic diskdrive get size

```
C:\Users\Lenovo>wmic diskdrive get size
Size
512105932800
```

3. Jelaskan apa yang ditampilkan oleh masing-masing perintah.

systeminfo

Menampilkan informasi detail sistem Windows, termasuk:

- Versi Windows dan build number
- Nama komputer dan domain
- Prosesor (CPU) yang digunakan
- Kapasitas RAM
- Waktu boot terakhir
- Pembaruan Windows yang terinstal

wmic os get caption,version

Menampilkan informasi sistem operasi:

- **Caption** → Nama OS (misalnya Windows 10, Windows 11)
- **Version** → Versi lengkap OS (misalnya 10.0.19045 untuk Windows 10)

wmic memorychip get capacity

Menampilkan kapasitas masing-masing modul RAM dalam **byte**.

Jika ada lebih dari satu modul, setiap kapasitas akan ditampilkan di baris terpisah.

wmic diskdrive get size

Menampilkan kapasitas total masing-masing hard drive atau SSD dalam **byte**.

Dapat digunakan untuk mengetahui ukuran total penyimpanan yang tersedia di sistem.

Percobaan 2: Pengelolaan File dan Direktori

1. Buat direktori baru dengan nama praktikum_cmd menggunakan perintah mkdir.
2. Masuk ke direktori tersebut menggunakan perintah cd.
3. Buat file kosong bernama file1.txt menggunakan perintah echo.
 - o Contoh: echo. > file1.txt
4. Salin file tersebut ke nama file2.txt menggunakan perintah copy.
5. Hapus file1.txt menggunakan perintah del.

```
C:\Users\Lenovo>mkdir Pratikum_cmd

C:\Users\Lenovo>echo>file.txt

C:\Users\Lenovo>copy file2.txt
The system cannot find the file specified.

C:\Users\Lenovo>copy file.txt file2.txt
1 file(s) copied.

C:\Users\Lenovo>del file.txt

C:\Users\Lenovo>dir
Volume in drive C is Windows-SSD
Volume Serial Number is D677-9C29

Directory of C:\Users\Lenovo
```

6. Tampilkan isi direktori menggunakan perintah dir.

Directory of C:\Users\Lenovo

```

11/03/2025 10.57 <DIR> .
05/02/2023 18.41 <DIR> ..
16/09/2021 01.35 6.877 -1.14-windows.xml
23/01/2023 08.36 <DIR> .android
01/12/2023 18.58 <DIR> .astropy
07/04/2022 13.04 11.658 .bash_history
23/01/2023 08.36 <DIR> .BigNox
08/02/2022 08.33 <DIR> .cache
01/07/2023 23.55 <DIR> .conda
29/03/2023 22.36 25 .condarc
30/05/2024 23.16 <DIR> .config
29/03/2023 22.35 <DIR> .continuum
01/07/2023 23.11 <DIR> .designer
02/10/2021 00.29 <DIR> .dia
26/09/2022 12.37 16 .emulator_console_auth_token
23/03/2022 22.38 301 .gitconfig
26/09/2022 11.23 <DIR> .gradle
06/12/2023 20.00 <DIR> .idea
01/07/2023 12.25 <DIR> .ipynb_checkpoints
17/03/2023 01.18 <DIR> .ipython
06/03/2025 15.23 <DIR> .jdk
17/03/2023 01.06 <DIR> .jupyter
29/03/2023 22.57 <DIR> .kaggle
31/05/2024 01.02 <DIR> .keras
26/09/2022 11.24 <DIR> .m2
01/07/2023 09.53 <DIR> .matplotlib
23/05/2022 22.09 <DIR> .nbi
26/11/2023 16.54 50 .node_repl_history
26/03/2022 22.21 <DIR> .Origin
26/03/2022 22.21 <DIR> .QtWebEngineProcess
03/11/2021 22.03 <DIR> .spss
11/03/2025 08.51 <DIR> .VirtualBox
01/07/2023 10.42 <DIR> .vscode
14/08/2021 17.44 <DIR> 3D Objects
29/03/2023 22.39 <DIR> anaconda3
26/09/2022 11.18 <DIR> AndroidStudioProjects
29/03/2023 23.14 528.783 anime-data-score-staff-synopsis-and-genre.zip
29/03/2023 23.14 692.950.589 anime-recommendation-database-2020.zip
20/08/2024 13.24 <DIR> BrawlhallaReplays
21/08/2021 00.08 151 BullseyeCoverageError.txt
05/02/2023 22.47 <DIR> Contacts
23/01/2023 08.36 298 d4ac4633ebd6440fa397b84f1bc94a3c.7z
29/03/2023 23.19 1.345.550 dataanime.csv
10/03/2025 14.22 <DIR> Desktop
10/03/2025 14.22 <DIR> Documents
11/03/2025 09.59 <DIR> Downloads
29/03/2023 23.24 67.447 estimated_numbers.csv
05/06/2023 18.09 <DIR> Facepacer
05/02/2023 22.47 <DIR> Favorites
11/03/2025 10.52 13 file2.txt
08/02/2022 00.13 <DIR> IdeaProjects
10/03/2025 04.39 <DIR> IdeaSnapshots
18/10/2021 23.06 <DIR> IMBSPSS Prak
29/03/2023 23.24 70.718 incidence_per_1000_pop_at_risk.csv
14/09/2022 11.15 66 inittk.ini
14/09/2022 11.15 41 inst.ini
06/03/2025 15.33 306.191 java_error_in_idea_38424.log
05/02/2023 22.47 <DIR> Links
29/03/2023 23.01 53.674 malaria-dataset.zip
17/02/2024 20.16 <DIR> Music
03/02/2022 14.47 <DIR> New folder
09/06/2023 16.13 <DIR> node_modules
14/09/2022 11.15 <DIR> Nox_share
14/09/2022 11.15 45 nuuid.ini

```

Percobaan 3: Mencari File dan Direktori

1. Cari file file2.txt di dalam direktori praktikum_cmd menggunakan perintah dir.

- Contoh: dir /s file2.txt

```
C:\Users\Lenovo>dir/s file2.txt
Volume in drive C is Windows-SSD
Volume Serial Number is D677-9C29

Directory of C:\Users\Lenovo

11/03/2025  10.52                13 file2.txt
                1 File(s)                13 bytes

Total Files Listed:
                1 File(s)                13 bytes
                0 Dir(s) 65.458.692.096 bytes free
```

2. Buat file baru bernama contoh.txt dan tambahkan teks "Ini adalah contoh teks" ke dalamnya.
3. Cari teks "contoh" dalam file contoh.txt menggunakan perintah findstr.

- Contoh: findstr "contoh" contoh.txt

```
C:\Users\Lenovo>echo "Ini adalah contoh teks">contoh.txt

C:\Users\Lenovo>
C:\Users\Lenovo>
C:\Users\Lenovo>findstr "contoh" contoh.txt
"Ini adalah contoh teks"
```

Percobaan 4: Melihat Format Perintah

1. Gunakan opsi /? untuk melihat bantuan dari perintah dir.

- Contoh: dir /?

```

C:\Users\Lenovo>dir /?
Displays a list of files and subdirectories in a directory.

DIR [drive:][path][filename] [/A[:attributes]] [/B] [/C] [/D] [/L] [/N]
  [/O[:sortorder]] [/P] [/Q] [/R] [/S] [/T[:timefield]] [/W] [/X] [/4]

[drive:][path][filename]
    Specifies drive, directory, and/or files to list.

/A      Displays files with specified attributes.
attributes  D Directories                R Read-only files
             H Hidden files              A Files ready for archiving
             S System files              I Not content indexed files
             L Reparse Points            O Offline files
             - Prefix meaning not

/B      Uses bare format (no heading information or summary).
/C      Display the thousand separator in file sizes. This is the
        default. Use /-C to disable display of separator.
/D      Same as wide but files are list sorted by column.
/L      Uses lowercase.
/N      New long list format where filenames are on the far right.
/O      List by files in sorted order.
sortorder  N By name (alphabetic)          S By size (smallest first)
            E By extension (alphabetic)    D By date/time (oldest first)
            G Group directories first      - Prefix to reverse order

/P      Pauses after each screenful of information.
/Q      Display the owner of the file.
/R      Display alternate data streams of the file.
/S      Displays files in specified directory and all subdirectories.
/T      Controls which time field displayed or used for sorting
timefield  C Creation
            A Last Access
            W Last Written

/W      Uses wide list format.
/X      This displays the short names generated for non-8dot3 file
        names. The format is that of /N with the short name inserted
        before the long name. If no short name is present, blanks are
        displayed in its place.

/4      Displays four-digit years
Press any key to continue . . .

```

2. Jelaskan opsi-opsi yang tersedia untuk perintah copy.

- **-a** → Menyalin dengan atribut asli (arsip).
- **-r** atau **-R** → Menyalin direktori secara rekursif.
- **-i** → Konfirmasi sebelum menimpa file.
- **-f** → Memaksa penyalinan tanpa konfirmasi.
- **-u** → Menyalin hanya jika file sumber lebih baru.
- **-v** → Menampilkan proses penyalinan.
- **-b** → Membuat backup file sebelum menimpa.
- **--help** → Menampilkan bantuan.
- **--version** → Menampilkan versi cp.

C. PowerShell

Percobaan 1: Mengetahui Informasi Sistem

1. Buka PowerShell.
2. Jalankan perintah berikut dan catat hasilnya:
 - Get-ComputerInfo

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

s://aka.ms/PSWindows
s\Lenovo> & Get-ComputerInfo

WindowsBuildLabEx           : 22621
                             .1.am
                             d64fr
                             e.ni_
                             relea
                             se.22
                             0506-
                             1250
WindowsCurrentVersion       : 6.3
WindowsEditionId            : CoreS
                             ingle
                             Langu
                             age
WindowsInstallationType     : Clie
                             nt
WindowsInstallDateFromRegistry : 05/02
                             /2023
                             15.4
                             6.49
WindowsProductId            : 00327
                             -3593
                             2-439
                             76-AA
                             OEM
WindowsProductName           : Windo
                             ws 10
```

- Get-Process

```
PS C:\Users\Lenovo> & Get-Process
```

Handles	NPM(K)	PM(K)	WS(K)	CPU(s)	Id	SI	ProcessName
185	11	5276	6480		9368	0	AggregatorHost
234	16	23688	336	0,16	26380	1	ai
158	9	2576	6544		3032	0	amdfendrsr
533	22	5712	3056	33,73	27996	1	AMDRESServ
446	42	100204	5488	0,58	27692	1	AMDRESSrcExt
373	22	10200	2724	0,31	25388	1	ApplicationFrameHost
440	48	42088	3020		17724	0	AppProvisioningPlugin
155	9	1636	52		10708	0	AppVShNotify
218	10	1808	6228		3028	0	atiesrxx
263	13	8632	18616	0,05	19036	0	audiodg
220	13	2992	4476	0,30	5660	1	AutoModeDetect
244	25	6312	2468	0,08	5948	1	backgroundTaskHost
688	41	22296	9936	1,27	22800	1	BingSvc
735	32	56592	30656	17,14	5336	1	BlueStacksServices
632	27	33108	9784	0,33	11108	1	BlueStacksServices
286	16	13280	10524	0,09	15912	1	BlueStacksServices
279	17	21532	5068	0,08	20156	1	BlueStacksServices
183	12	11576	3120	0,06	19476	1	Canva
259	43	56992	3372	0,14	23808	1	Canva
111	8	2680	5812	22,81	27708	1	cmd
134	10	1604	856	0,00	18332	1	cncmd
121	8	5336	1352		9352	0	conhost
141	10	5916	1828	0,03	10228	1	conhost
120	8	5408	1240	0,00	14692	1	conhost
145	8	1356	8580	0,00	16188	1	conhost
162	10	5776	1300		17752	0	conhost
145	8	1344	7228	0,02	25432	1	conhost
90	8	1300	944		10548	0	crashpad_handler

○ Get-Service

```
PS C:\Users\Lenovo> & Get-Service
```

Status	Name	DisplayName
Stopped	AarSvc_32039f	Agent Activation Runtime_32039f
Stopped	AJRouterr	AllJoyn Router Service
Stopped	ALG	Application Layer Gateway Service
Running	AMD Crash Defen...	AMD Crash Defender Service
Running	AMD External Ev...	AMD External Events Utility
Stopped	AntiCheatExpert...	AntiCheatExpert Service
Stopped	AppIDSvc	Application Identity
Running	Appinfo	Application Information
Stopped	AppReadiness	App Readiness
Running	AppXSvc	AppX Deployment Service (AppXSVC)
Running	AudioEndpointBu...	Windows Audio Endpoint Builder
Running	Audiosrv	Windows Audio
Stopped	autotimesvc	Cellular Time
Stopped	AxInstSV	ActiveX Installer (AxInstSV)
Stopped	BcastDVRUserSer...	GameDVR and Broadcast User Service_...
Stopped	BDESVC	BitLocker Drive Encryption Service
Running	BFE	Base Filtering Engine
Running	BITS	Background Intelligent Transfer Ser...
Running	BluetoothUserSe...	Bluetooth User Support Service_32039f
Running	BrokerInfrastru...	Background Tasks Infrastructure Ser...
Stopped	Browser	Computer Browser
Running	BTAGService	Bluetooth Audio Gateway Service
Running	BthAvctpSvc	AVCTP service
Running	bthserv	Bluetooth Support Service
Running	camsvc	Capability Access Manager Service
Stopped	CaptureService_...	CaptureService_32039f
Running	cbdhsvc_32039f	Clipboard User Service_32039f
Running	CDPSvc	Connected Devices Platform Service

○ Get-Disk

```

PS C:\Users\Lenovo> & Get-Disk

Number F Serial Number HealthStatus
-----
0 M 00A0_7501_2D44_D986. Healthy

PS C:\Users\Lenovo>
PS C:\Users\Lenovo>

```

3. Jelaskan apa yang ditampilkan oleh masing-masing perintah.

Percobaan 2: Pengelolaan File dan Direktori

1. Buat direktori baru dengan nama praktikum_ps menggunakan perintah New-Item.
 - o Contoh: New-Item -Path .\praktikum_ps -ItemType Directory

```

PS C:\Users\Lenovo> New-Item -Path .\praktikum_ps -ItemType Directory

Directory: C:\Users\Lenovo

Mode                LastWriteTime         Length Name
----                -
d-----         11/03/2025      11.15          praktikum_ps

```

2. Masuk ke direktori tersebut menggunakan perintah Set-Location.

```

PS C:\Users\Lenovo> Set-Location.
Set-Location. : The term 'Set-Location.' is not recognized as the name of a cmdlet, function, script file, or operable program. Chec
k the spelling of the name, or if a path was included, verify that the path is correct and try again.
At line:1 char:1
+ Set-Location.
+ ~~~~~
+ CategoryInfo          : ObjectNotFound: (Set-Location.:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

```

3. Buat file kosong bernama file1.txt menggunakan perintah New-Item.

- o Contoh: New-Item -Path .\file1.txt -ItemType File

```
PS C:\Users\Lenovo> New-Item -Path .\file1.txt -ItemType File

Directory: C:\Users\Lenovo

Mode                LastWriteTime         Length Name
----                -
-a-----         11/03/2025   11.16             0 file1.txt
```

4. Salin file tersebut ke nama file2.txt menggunakan perintah Copy-Item.

5. Hapus file1.txt menggunakan perintah Remove-Item.

6. Tampilkan isi direktori menggunakan perintah Get-ChildItem.


```
PS C:\Users\Lenovo> Copy-Item -Path ./file1.txt -Destination./file2.txt
PS C:\Users\Lenovo> Remove-Item -Path ./file1.txt
PS C:\Users\Lenovo> Get-ChildItem
```

Directory: C:\Users\Lenovo

Mode	LastWriteTime	Length	Name
d-----	23/01/2023	08.36	.android
d-----	01/12/2023	18.58	.astropy
d-----	23/01/2023	08.36	.BigNox
d-----	08/02/2022	08.33	.cache
d-----	01/07/2023	23.55	.conda
d-----	30/05/2024	23.16	.config
d-----	29/03/2023	22.35	.continuum
d-----	01/07/2023	23.11	.designer
d-----	02/10/2021	00.29	.dia
d-----	26/09/2022	11.23	.gradle
d-----	06/12/2023	20.00	.idea
d-----	01/07/2023	12.25	.ipynb_checkpoints
d-----	17/03/2023	01.18	.ipython
d-----	06/03/2025	15.23	.jdk
d-----	17/03/2023	01.06	.jupyter
d-----	29/03/2023	22.57	.kaggle
d-----	31/05/2024	01.02	.keras
d-----	26/09/2022	11.24	.m2
d-----	01/07/2023	09.53	.matplotlib
d-----	23/05/2022	22.09	.nbi
d-----	26/03/2022	22.21	.Origin
d-----	26/03/2022	22.21	.QtWebEngineProcess
d-----	03/11/2021	22.03	.spss
d-----	11/03/2025	08.51	.VirtualBox
d-----	01/07/2023	10.42	.vscode
d-r----	14/08/2021	17.44	3D Objects
d-----	29/03/2023	22.39	anaconda3
d-----	26/09/2022	11.18	AndroidStudioProjects
d-----	20/08/2024	13.24	BrawlhallaReplays
d-r----	05/02/2023	22.47	Contacts
d-r----	10/03/2025	14.22	Desktop
d-r----	10/03/2025	14.22	Documents
d-r----	11/03/2025	09.59	Downloads
d-----	05/06/2023	18.09	Facepager
d-r----	05/02/2023	22.47	Favorites
d-----	08/02/2022	00.13	IdeaProjects
d-----	10/03/2025	04.39	IdeaSnapshots
d-----	18/10/2021	23.06	IMBSPSS Prak
d-r----	05/02/2023	22.47	Links
d-r----	17/02/2024	20.16	Music
d-----	03/02/2022	14.47	New folder
d-----	09/06/2023	16.13	node_modules
d-----	14/09/2022	11.15	Nox_share
dar--l	11/03/2025	07.19	OneDrive
d-r----	13/02/2025	08.13	Pictures
d-----	11/03/2025	11.15	praktikum_ps

Percobaan 3: Mencari File dan Direktori

1. Cari file file2.txt di dalam direktori praktikum_ps menggunakan perintah Get-ChildItem.
 - o Contoh: Get-ChildItem -Recurse -Filter file2.txt

```
Directory: C:\Users\Lenovo

Mode                LastWriteTime         Length Name
----                -
-a-----         11/03/2025   11.16             0 file2.txt
```

2. Buat file baru bernama contoh.txt dan tambahkan teks "Ini adalah contoh teks" ke dalamnya.
3. Cari teks "contoh" dalam file contoh.txt menggunakan perintah Select-String.
 - o Contoh: `Select-String -Pattern "contoh" -Path .\contoh.txt`

```
PS C:\Users\Lenovo> "Ini adalah contoh teks" | Out-File -FilePath .\contoh.txt
PS C:\Users\Lenovo> Select-String -Pattern "contoh" -Path .\contoh.txt

contoh.txt:1:Ini adalah contoh teks
```

Percobaan 4: Melihat Format Perintah

1. Gunakan perintah Get-Help untuk melihat bantuan dari perintah Get-ChildItem.
 - o Contoh: `Get-Help Get-ChildItem`

```
NAME
Get-ChildItem

SYNTAX
Get-ChildItem [-Path] <string[]> [[-Filter] <string>] [-Include <string[]>] [-Exclude <string[]>] [-Recurse] [-Depth <uint32>] [-Force] [-Name] [-UseTransaction] [-Attributes {ReadOnly | Hidden | System | Directory | Archive | Device | Normal | Temporary | SparseFile | ReparsePoint | Compressed | Offline | NotContentIndexed | Encrypted | IntegrityStream | NoScrubData}] [-FollowSymlink] [-Directory] [-File] [-Hidden] [-ReadOnly] [-System] [-CommonParameters]

Get-ChildItem [[-Filter] <string>] [-LiteralPath] <string[]> [-Include <string[]>] [-Exclude <string[]>] [-Recurse] [-Depth <uint32>] [-Force] [-Name] [-UseTransaction] [-Attributes {ReadOnly | Hidden | System | Directory | Archive | Device | Normal | Temporary | SparseFile | ReparsePoint | Compressed | Offline | NotContentIndexed | Encrypted | IntegrityStream | NoScrubData}] [-FollowSymlink] [-Directory] [-File] [-Hidden] [-ReadOnly] [-System] [-CommonParameters]

ALIASES
gci
ls
dir

REMARKS
Get-Help cannot find the Help files for this cmdlet on this computer. It is displaying only partial help.
-- To download and install Help files for the module that includes this cmdlet, use Update-Help.
-- To view the Help topic for this cmdlet online, type: "Get-Help Get-ChildItem -Online" or
go to https://go.microsoft.com/fwlink/?LinkID=113308.
```

2. Jelaskan opsi-opsi yang tersedia untuk perintah Copy-Item.

- Path** = Menentukan file atau folder yang akan disalin.
- Destination** = Menentukan lokasi tujuan salinan.
- Recurse** = Menyalin direktori beserta isinya secara rekursif.
- Force** = Memaksa penyalinan meskipun file sudah ada atau ada keterbatasan izin.
- PassThru** = Menampilkan hasil salinan ke output.
- Filter** = Menyaring file atau folder berdasarkan pola tertentu.
- Include** = Menentukan file atau folder spesifik yang ingin disalin.
- Exclude** = Mengecualikan file atau folder tertentu saat menyalin.
- Confirm** = Meminta konfirmasi sebelum menyalin.
- Whatif** = Mensimulasikan perintah tanpa benar-benar menjalankannya

Latihan

Latihan 1: Linux

1. Buat direktori projek dan masuk ke dalamnya.
2. Buat file log.txt, isi dengan teks "Log pertama".
3. Tambahkan teks baru ke dalam file.
4. Salin file ke direktori backup.
5. Hapus file dalam direktori projek.
6. Lihat semua pengguna yang sedang login.

```
capa@capa:~/Pratikum_Linux$ mkdir
mkdir: missing operand
Try 'mkdir --help' for more information.
capa@capa:~/Pratikum_Linux$ mkdir Pratikum_cmd
capa@capa:~/Pratikum_Linux$ cd
capa@capa:~$ mkdir projek
capa@capa:~$ cd projek
capa@capa:~/projek$ echo "Log Pertama">log.txt
capa@capa:~/projek$ cp log.txt backup.txt
capa@capa:~/projek$ rm log.txt
capa@capa:~/projek$ who
capa      tty1          2025-03-11 02:16
capa@capa:~/projek$
```

Latihan 2: Command Prompt Windows

1. Buat direktori praktikum dan masuk ke dalamnya.
2. Buat file teks test.txt, isi dengan teks "Command Prompt Test".
3. Salin file ke direktori cadangan.
4. Hapus file dalam praktikum.
5. Tampilkan daftar koneksi jaringan yang aktif.

```

Microsoft Windows [Version 10.0.22631.4974]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Lenovo>mkdir pratikum
A subdirectory or file pratikum already exists.

C:\Users\Lenovo>mkdir pratikum
A subdirectory or file pratikum already exists.

C:\Users\Lenovo>mkdir pratikum

C:\Users\Lenovo>cd pratikum

C:\Users\Lenovo\pratikum>echo Command Prompt Test> test.txt

C:\Users\Lenovo\pratikum>copy test.txt cadangan.txt
1 file(s) copied.

C:\Users\Lenovo\pratikum>del test.txt

C:\Users\Lenovo\pratikum>netstat -an

Active Connections

Proto Local Address          Foreign Address         State
TCP   0.0.0.0:135              0.0.0.0:0               LISTENING
TCP   0.0.0.0:445              0.0.0.0:0               LISTENING
TCP   0.0.0.0:5040             0.0.0.0:0               LISTENING
TCP   0.0.0.0:6646             0.0.0.0:0               LISTENING
TCP   0.0.0.0:49664            0.0.0.0:0               LISTENING
TCP   0.0.0.0:49665            0.0.0.0:0               LISTENING
TCP   0.0.0.0:49666            0.0.0.0:0               LISTENING
TCP   0.0.0.0:49667            0.0.0.0:0               LISTENING

```

Latihan 3: PowerShell Windows

1. Buat direktori script dan masuk ke dalamnya.
2. Buat file test.ps1 dengan isi "Write-Host 'Hello PowerShell'".
3. Jalankan script tersebut.
4. Hapus file dalam script.
5. Lihat daftar layanan Windows yang sedang berjalan.

```

PS C:\Users\Lenovo> New-Item -Path .\script -ItemType Directory

Directory: C:\Users\Lenovo

Mode                LastWriteTime         Length Name
----                -
d-----         11/03/2025         12.12         script

PS C:\Users\Lenovo> New-Item -Path .\test.ps1 -ItemType File

Directory: C:\Users\Lenovo

Mode                LastWriteTime         Length Name
----                -
-a-----         11/03/2025         12.13             0 test.ps1

PS C:\Users\Lenovo> "Write-Host 'Hello PowerShell'" | Out-File -FilePath .\test.ps1

PS C:\Users\Lenovo> .\test.ps1
.\test.ps1 : File C:\Users\Lenovo\test.ps1 cannot be loaded because running scrip
ts is disabled on this system. For more information, see about_Execution_Poli
cies at https://go.microsoft.com/fwlink/?LinkID=135170.
At line:1 char:1
+ .\test.ps1
+ ~~~~~
+ CategoryInfo          : SecurityError: (:) [], PSSecurityException
+ FullyQualifiedErrorId : UnauthorizedAccess

PS C:\Users\Lenovo> Set-ExecutionPolicy Remotesigned -Scope CurrentUser

PS C:\Users\Lenovo> .\test.ps1
Hello PowerShell

PS C:\Users\Lenovo> Get-Service

Status  Name                DisplayName
-----
Stopped AarSvc_32039f       Agent Activation Runtime_32039f
Stopped AJRouter           AllJoyn Router Service
Stopped ALG           Application Layer Gateway Service
Running AMD Crash Defen... AMD Crash Defender Service
Running AMD External Ev... AMD External Events Utility
Stopped AntiCheatExpert... AntiCheatExpert Service
Stopped AppIDSvc       Application Identity
Running Appinfo         Application Information

```

Latihan 4: Bandingkan Shell/Terminal

1. Bandingkan perintah-perintah dasar di Linux, Command Prompt, dan PowerShell.
2. Buat tabel perbandingan untuk perintah-perintah berikut:
 - o Menampilkan isi direktori.
 - o Membuat file dan direktori.
 - o Mencari file.
 - o Menampilkan informasi sistem.

Perintah	Linux	Command Prompt	Powershell
Menampilkan isi direktori	ls	dir	Get-ChildItem(ls)
Membuat file	touch file.txt	echo. > file.txt	New-Item file.txt
Mencari file	find / -name file	dir /s /b file	Get-ChildItem -Recurse -Filter file
Membuat direktori	mkdir folder	mkdir folder	New-Item -ItemType Directory folder
Menampilkan informasi sistem	uname -a	systeminfo	Get-ComputerInfo