Operating system Command

Windows Command:

1. help

- **Description**: Lists all available commands in the Command Prompt with a brief description.
- Example: help

2. cls

- **Description**: Clears the Command Prompt screen.
- Example: cls

3. cd

- **Description**: Changes the current directory.
- Example: cd C:\Users\YourUsername\Documents

4. dir

- **Description**: Lists all files and folders in the current directory.
- Example: dir

5. copy

- **Description**: Copies files from one location to another.
- Example: copy C:\source\file.txt D:\destination

6. move

- **Description**: Moves files from one location to another.
- **Example**: move C:\source\file.txt D:\destination

7. del

- **Description**: Deletes one or more files.
- Example: del C:\source\file.txt

8. mkdir

• **Description**: Creates a new directory.

• Example: mkdir C:\new folder

9. rmdir

• **Description**: Deletes a directory (folder).

• Example: rmdir C:\new folder

10. ipconfig

• **Description**: Shows network configuration details, such as IP address and subnet mask.

• Example: ipconfig

11. ping

• **Description**: Tests network connectivity to a remote host.

• Example: ping google.com

12. tracert

• **Description**: Shows the path taken to a destination IP address.

• Example: tracert google.com

13. netstat

• **Description**: Displays active network connections and listening ports.

• Example: netstat -an

14. tasklist

• **Description**: Lists all running processes on the system.

• Example: tasklist

15. taskkill

• **Description**: Ends a running process by its name or PID.

• Example: taskkill /IM notepad.exe

16. systeminfo

• **Description**: Shows detailed system information.

• Example: systeminfo

17. chkdsk

• **Description**: Checks for disk errors and repairs them.

• Example: chkdsk C: /f

18. sfc /scannow

• **Description**: Scans and repairs corrupted system files.

• Example: sfc /scannow

19. diskpart

• **Description**: Manages disks, partitions, and volumes.

• Example: diskpart

20. format

• **Description**: Formats a disk for use with Windows.

• Example: format D:

21. shutdown

• **Description**: Shuts down, restarts, or logs off the computer.

• Example: shutdown /r /t 0 (Restarts the computer immediately)

22. powercfg

• **Description**: Configures power settings and displays energy efficiency details.

• Example: powercfg /hibernate on

23. gpupdate

• **Description**: Forces a Group Policy update.

• Example: gpupdate /force

24. gpresult

• **Description**: Displays applied Group Policy settings.

• Example: gpresult /R

25. regedit

• **Description**: Opens the Windows Registry Editor.

• Example: regedit

26. sc config

• **Description**: Configures Windows services.

• Example: sc config Spooler start= auto

27. sc start / stop

- **Description**: Starts or stops a Windows service.
- Example: sc start Spooler (Starts the Print Spooler service)

28. net start / stop

• **Description**: Starts or stops network services.

• Example: net start Spooler

29. net use

• **Description**: Maps or disconnects network drives.

• Example: net use Z: \\server\share

30. net user

• **Description**: Manages user accounts.

• Example: net user username password /add

31. hostname

• **Description**: Displays the computer's hostname.

• Example: hostname

32. set

• **Description**: Displays, sets, or removes environment variables.

• Example: set PATH

33. date

• **Description**: Displays or sets the current date.

• Example: date

34. time

• **Description**: Displays or sets the current time.

• Example: time

35. echo

• **Description**: Displays a line of text.

• Example: echo Hello, world!

36. pause

• **Description**: Pauses execution in a batch file.

• Example: pause

37. attrib

• **Description**: Displays or changes file attributes.

• Example: attrib +r file.txt

38. assoc

• **Description**: Displays or modifies file type associations.

• **Example**: assoc .txt=txtfile

39. cipher

• **Description**: Encrypts or decrypts files.

• Example: cipher /e C:\secret_folder

40. cacls

• **Description**: Changes file permissions.

• Example: cacls file.txt /g username:f

41. fc

• **Description**: Compares two files and displays differences.

• Example: fc file1.txt file2.txt

42. find

• **Description**: Searches for text within files.

• Example: find "keyword" file.txt

43. schtasks

• **Description**: Manages scheduled tasks.

• Example: schtasks /create /tn Backup /tr "backup.bat" /sc daily /st 02:00

44. wmic

- **Description**: Windows Management Instrumentation Command-line to get system info.
- Example: wmic os get name

45. driverquery

• **Description**: Lists all installed drivers.

• Example: driverquery

46. shutdown /s /f /t 0

• **Description**: Instantly shuts down the computer.

• Example: shutdown /s /f /t 0

47. whoami

• **Description**: Displays the current user and domain.

• Example: whoami

48, title

• **Description**: Sets the Command Prompt window title.

• Example: title My Custom Command Prompt

49. pathping

• **Description**: Combines ping and tracert for a detailed path analysis.

• Example: pathping google.com

50. route

• **Description**: Displays and modifies the IP routing table.

• Example: route print

WMIC:

WMIC (Windows Management Instrumentation Command-line) commands, which are powerful tools for querying and managing system information on Windows:

1. Get Operating System Information

- Command: wmic os get caption, version, architecture
- **Description**: Retrieves the operating system name, version, and architecture.
- Example Output: Microsoft Windows 10 Pro 10.0.19041 x64

2. Get Computer System Information

- Command: wmic computersystem get model, manufacturer, name, systemtype
- **Description**: Displays details about the computer system model, manufacturer, name, and system type.
- Example Output: Dell Inc. XPS 13 9370 Desktop

3. List Installed Software

- Command: wmic product get name, version
- **Description**: Lists all installed software on the system with their versions.
- **Note**: This command may take a while to run and may not show all software.
- Example Output: Microsoft Office 365 16.0.12325.20288

4. Get CPU Information

- Command: wmic cpu get name, numberofcores, maxclockspeed
- **Description**: Shows details about the CPU, including its name, number of cores, and max clock speed.
- Example Output: Intel(R) Core(TM) i7-8565U CPU 1800 MHz

5. Get Hard Drive Information

- Command: wmic diskdrive get model, size, status
- **Description**: Provides details on the installed hard drives, including model, size (in bytes), and status.
- Example Output: Samsung SSD 970 EVO 500GB Healthy

6. Get Memory (RAM) Information

- Command: wmic memorychip get capacity, speed, manufacturer
- **Description**: Displays information on each installed memory module, including capacity (in bytes), speed, and manufacturer.
- Example Output: 8 GB 2666 MHz Samsung

7. Get Network Adapter Information

- Command: wmic nic get name, macaddress, speed
- **Description**: Lists network adapters, including their MAC addresses and speeds.
- Example Output: Intel(R) Wi-Fi 6 AX201 2400 Mbps 00-1A-2B-3C-4D-5E

8. Check Battery Status (for laptops)

- Command: wmic path win32_battery get estimatedchargeRemaining, batterystatus
- **Description**: Provides information on the battery status, including the remaining charge percentage.
- Example Output: Estimated Charge Remaining: 85%

9. Get BIOS Information

- Command: wmic bios get manufacturer, smbiosbiosversion, serialnumber
- **Description**: Displays BIOS information such as the manufacturer, version, and serial number.
- Example Output: Dell Inc. 1.8.1 F7G8J5B

10. Get List of Running Processes

- Command: wmic process get name, processid
- **Description**: Lists all currently running processes with their process IDs (PIDs).
- Example Output: explorer.exe 1234