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`