

# WINDOWS COMMANDS

## General commands

- USER MODE VS ADMIN MODE
- LAUNCH COMMAND PROMPT
- CHANING A DRIVE
- CHANGING A DIRECTORY
- LIST DIRECTORY
- CLEARING CONSOLE
- SYSTEM DATE AND TIME

## Registry commands

- REG ADD
- REG DELETE
- REG COPY
- REG SAVE
- REG RESTORE
- REG EXPORT
- REG IMPORT
- REG QUERY

## Service Commands

- SC CONFIG
- SC CONTINUE
- SC ENUMDEPEND
- SC QC
- SC FAILURE
- SC PAUSE
- SC QUERY "SERVICE NAME"
- SC START
- SC STOP
- NET START
- NET STOP "SERVICE NAME"
- SFC/SCANNOW

## **Network commands**


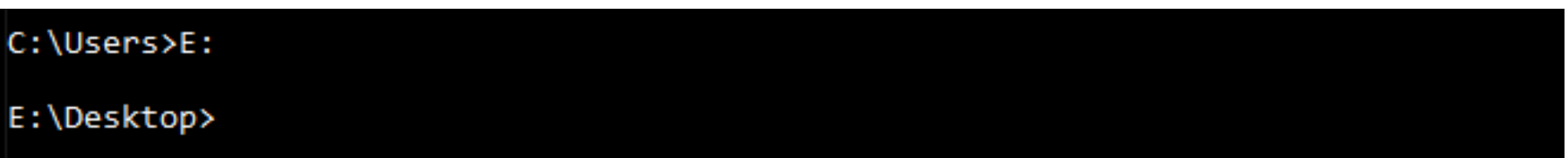
- **FTP**

- **DNS**

- **IPCONFIG**
- **IPCONFIG /ALL**
- **NSLOOKUP**
- **PING**
- **TRACERT**


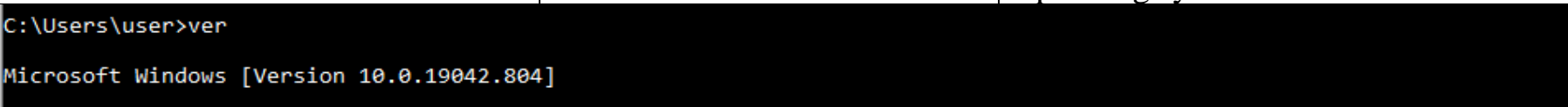

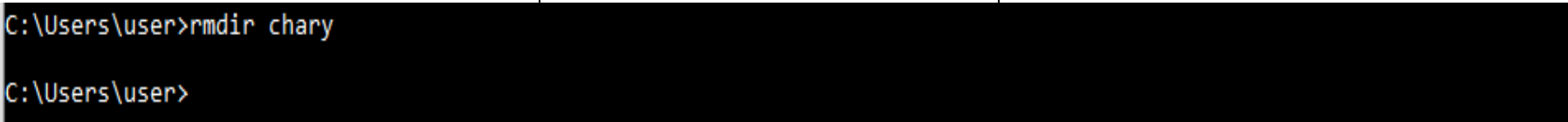
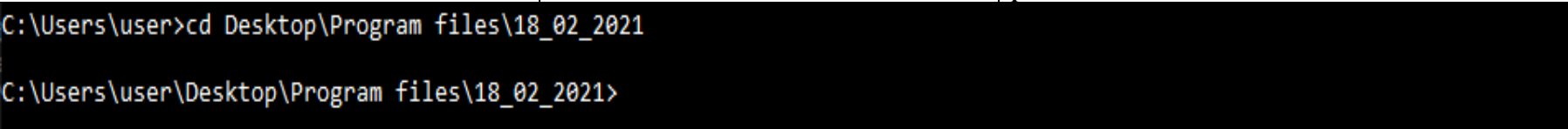
## **Memory**

## General windows commands:

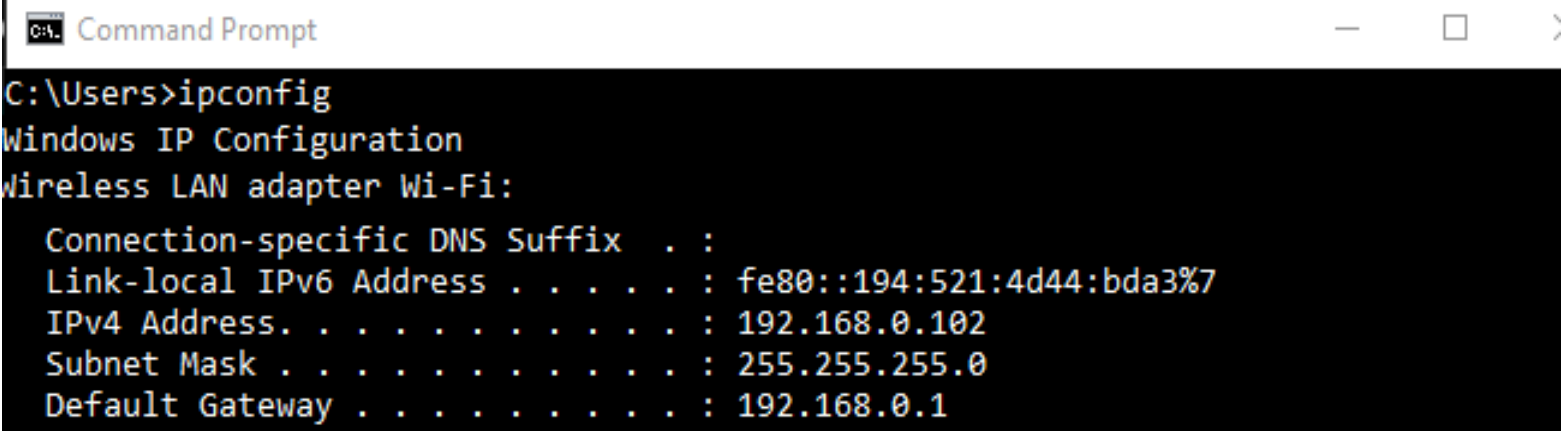
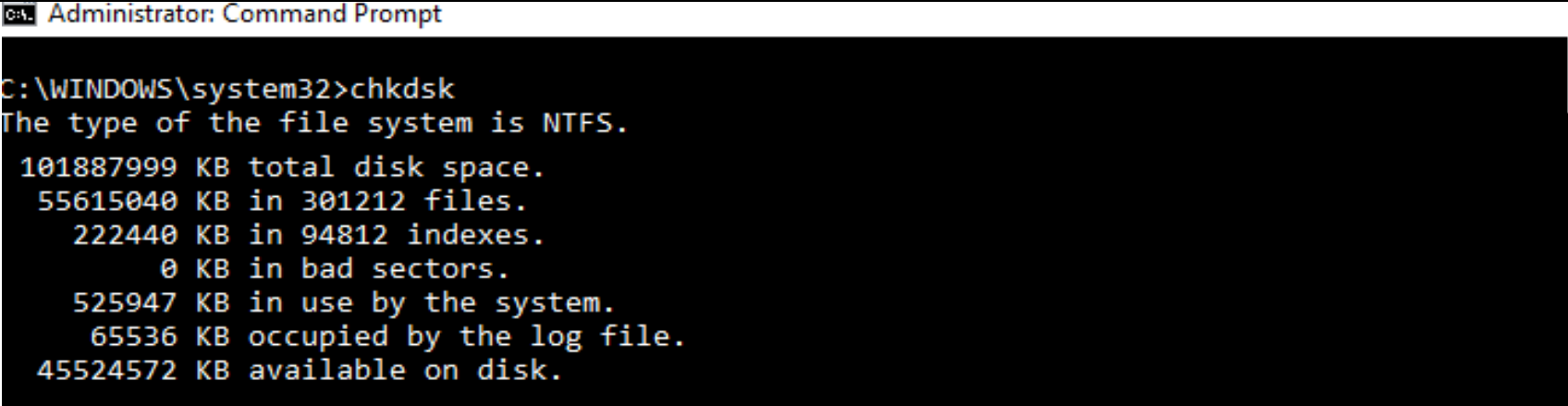
S.no	Command	Command usage	Description
1	wmic logicaldisk get name	wmic logicaldisk get name	To display, available drives in system.
			
2	Drive name:	E:	To redirect to system drive E, similarly for remaining drives use drive name with column.
			

3	Dir	dir	To know, what are the folders in that particular Drive.
	<pre>C:\Users\user&gt;dir Volume in drive C has no label. Volume Serial Number is CA55-AEBF  Directory of C:\Users\user 20-Feb-21  01:41 PM    &lt;DIR&gt;          Contacts 22-Feb-21  12:48 PM    &lt;DIR&gt;          Desktop 20-Feb-21  01:42 PM    &lt;DIR&gt;          Documents 23-Feb-21  01:33 AM    &lt;DIR&gt;          Downloads</pre>		
4	cd folder name	cd <Folder name>	To go into the file in that particular drive
	<pre>C:\Users\user&gt;cd contacts C:\Users\user\Contacts&gt;</pre>		
5	cd ..&cd ../..	cd ..	To close the opened file & moving to previous folder
	<pre>E:\SDP_RM2021\assignments\assignment_0_with_functions&gt;cd .. E:\SDP_RM2021\assignments&gt; E:\SDP_RM2021\assignments&gt;cd .. E:\SDP_RM2021&gt;cd .. E:\&gt;cd SDP_RM2021\assignments\assignment_0_with_functions E:\SDP_RM2021\assignments\assignment_0_with_functions&gt;cd ../.. E:\SDP_RM2021&gt;</pre>		
6	Cls	cls	To clear the command prompt
7	Date	date	To view date and we can change the date
	<pre>C:\Users\user&gt;date The current date is: 23-Feb-21 Enter the new date: (dd-mm-yy)</pre>		

8	Time	time	We can see the time and we can modify
	<pre>C:\Users\user&gt;time The current time is:  2:43:26.86 Enter the new time:</pre>		
9	Cmd	cmd	To open/restart command prompt freshly
	<pre>C:\Users\user&gt;cmd Microsoft Windows [Version 10.0.19042.804] (c) 2020 Microsoft Corporation. All rights reserved. C:\Users\user&gt;</pre>		
10	Hostname	hostname	Pc name will shown
	<pre>C:\Users\user&gt;hostname DESKTOP-S7VJU50 C:\Users\user&gt;</pre>		
11	Tasklist	tasklist	To see running applications in your pc
	<pre>C:\Users\user&gt;tasklist  Image Name                   PID Session Name        Session#    Mem Usage ===== System Idle Process          0 Services              0             8 K System                        4 Services              0            120 K Registry                     100 Services             0          53,132 K smss.exe                     372 Services             0           1,012 K csrss.exe                     524 Services             0           5,068 K csrss.exe                     640 Console               1           5,488 K System Idle Process          0 Services              0             8 K System                        4 Services              0            120 K Registry                     100 Services             0          53,132 K smss.exe                     372 Services             0           1,012 K csrss.exe                     524 Services             0           5,068 K csrss.exe                     640 Console               1           5,488 K</pre>		

12	Title	title <name>	To change Command prompt title name to given name
			
13	Ver	ver	Operating system version will shown
			
14	Mkdir	Mkdir<Filename>	To create New File
			
15	Rmdir	rmdir< filename>	To Remove File
			
16	Cd	cd <path>	To move to particular folder by using path
			

17	Rename	Rename <file1name><file2name>	To rename the file., if there is a spaces in folder name, then give as string, otherwise no need to place in quotes
	<pre>E:\&gt;rename "e data" e_data  E:\&gt;dir Volume in drive E has no label. Volume Serial Number is 28B3-0C30</pre>		
18	Del	del filename	To Deletethe file, not supports for folder delete.
	<pre>E:\SDP_RM2021&gt;del files_copy.py</pre>		
19	Systeminfo	systeminfo	To see the total information of your system.
	<pre>E:\SDP_RM2021&gt;Systeminfo  Host Name:                DESKTOP-S7VJU50 OS Name:                  Microsoft Windows 10 Pro OS Version:               10.0.19042 N/A Build 19042 OS Manufacturer:         Microsoft Corporation OS Configuration:        Standalone Workstation OS Build Type:             Multiprocessor Free Registered Owner:         user Registered Organization:   by adguard Product ID:                00331-10000-00001-AA493 Original Install Date:     20-Feb-21, 01:33:59 PM System Boot Time:         22-Feb-21, 10:26:14 PM System Manufacturer:       LENOVO</pre>		

20	Ipconfig	ipconfig	It will display ip address and subnet mask & default gateway
	 <pre> C:\Users&gt;ipconfig  Windows IP Configuration  Wireless LAN adapter Wi-Fi:      Connection-specific DNS Suffix  . :      Link-local IPv6 Address . . . . . : fe80::194:521:4d44:bda3%7     IPv4 Address. . . . . : 192.168.0.102     Subnet Mask . . . . . : 255.255.255.0     Default Gateway . . . . . : 192.168.0.1 </pre>		
21	Chkdsk	chkdsk	works in Administrator command prompt only , it gives disk files and memory,
	 <pre> C:\WINDOWS\system32&gt;chkdsk  The type of the file system is NTFS.  101887999 KB total disk space.  55615040 KB in 301212 files.   222440 KB in 94812 indexes.      0 KB in bad sectors.  525947 KB in use by the system.   65536 KB occupied by the log file. 45524572 KB available on disk. </pre>		
22	Format	format	to delete entire data in that location



23	Ping	ping	<p>It is primary TCP/IP command to troubleshoot connectivity, reachability.</p> <pre> C:\&gt;ping  Usage: ping [-t] [-a] [-n count] [-l size] [-f] [-i TTL] [-v TOS]            [-r count] [-s count] [[-j host-list]   [-k host-list]]            [-w timeout] [-R] [-S srcaddr] [-c compartment] [-p]            [-4] [-6] target_name  Options:   -t           Ping the specified host until stopped.                To see statistics and continue - type Control-Break;                To stop - type Control-C.   -a           Resolve addresses to hostnames.   -n count     Number of echo requests to send.   -l size      Send buffer size.   -f           Set Don't Fragment flag in packet (IPv4-only). </pre>
24	Attrib	Attrib< action >	<p>Used to remove &amp; set files attributes(hidden,read-only,system archive ). Attributes provides security to software programs.</p> <pre> C:\Users\user&gt;help attrib Displays or changes file attributes.  ATTRIB [+R   -R] [+A   -A] [+S   -S] [+H   -H] [+O   -O] [+I   -I] [+X   -X] [+P   -P] [+U   -U]       [drive:][path][filename] [/S [/D]] [/L]  +   Sets an attribute. -   Clears an attribute. R   Read-only file attribute. A   Archive file attribute. S   System file attribute. H   Hidden file attribute. </pre>

25	Net	net	used to update or fix a network or view its settings
	<pre> C:\&gt;net HELP The syntax of this command is:  NET HELP command -or- NET command /HELP  Commands available are:  NET ACCOUNTS      NET HELPMSG      NET STATISTICS NET COMPUTER      NET LOCALGROUP  NET STOP NET CONFIG        NET PAUSE       NET TIME NET CONTINUE      NET SESSION     NET USE NET FILE          NET SHARE       NET USER NET GROUP         NET START       NET VIEW NET HELP </pre>		
26	Help	Help <command name>	To See All The Commands and syntax's of a command
	<pre> C:\&gt;help For more information on a specific command, type HELP command-name ASSOC          Displays or modifies file extension associations. ATTRIB         Displays or changes file attributes. BREAK          Sets or clears extended CTRL+C checking. BCDEDIT        Sets properties in boot database to control boot loading. CACLS          Displays or modifies access control lists (ACLs) of files. CALL           Calls one batch program from another. CD             Displays the name of or changes the current directory. CHCP           Displays or sets the active code page number. CHDIR          Displays the name of or changes the current directory. CHKDSK         Checks a disk and displays a status report. CHKNTFS        Displays or modifies the checking of disk at boot time. </pre>		

27	Shutdown	Shutdown <option>	System will turned off, according to the given option
	<pre> C:\&gt;shutdown Usage: shutdown [/i   /l   /s   /sg   /r   /g   /a   /p   /h   /e   /o] [/hybrid] [/soft] [/fw] [/f]         [/m \\computer][/t xxx][/d [p u:]xx:yy [/c "comment"]]  No args    Display help. This is the same as typing /?. /?         Display help. This is the same as not typing any options. /i         Display the graphical user interface (GUI).            This must be the first option. /l         Log off. This cannot be used with /m or /d options. /s         Shutdown the computer. /sg        Shutdown the computer. On the next boot, if Automatic Restart Sign-On            is enabled, automatically sign in and lock last interactive user.            After sign in, restart any registered applications. /r         Full shutdown and restart the computer. /g         Full shutdown and restart the computer. After the system is rebooted,            if Automatic Restart Sign-On is enabled, automatically sign in and </pre>		

## To know the Registry command operation and command syntax:

	Command	Command usage	Description
1	add	REG ADD KeyName [{/v ValueName   /ve}] [/t Type] [/f]	Adds a new subkey or entry to the registry
	<pre> C:\Windows\system32&gt;reg add HKLM\SOFTWARE\phani /v appinfo /t REG_DWORD /d 1 /f The operation completed successfully. </pre>		
2	copy	REG COPY KeyName1 KeyName2 [/s] [/f]	Copies a registry entry to a specified location on a local or remote machine.
	<pre> C:\Windows\system32&gt;reg copy HKLM\SOFTWARE\phani1 HKLM\SOFTWARE\phani2 /s Value SOFTWARE\phani1\appinfo exists. Overwrite (Yes/No/All)? yes The operation completed successfully. </pre>		

3	delete	REG DELETE KeyName [{/v ValueName   /ve   /va}] [/f]	Deletes a subkey or entries.
	C:\Windows\system32>reg delete HKLM\SOFTWARE\phani Permanently delete the registry key HKEY_LOCAL_MACHINE\SOFTWARE\phani (Yes/No)? yes The operation completed successfully.		
4	export	REG EXPORT KeyName FileName [/y]	Copies the specified subkeys, entries, and values of the local computer into a file for transfer to other servers.
	C:\Windows\system32>reg export HKLM\SOFTWARE\phani1 c:/regkeybackup.reg The operation completed successfully.		
5	Import	REG IMPORT FileName	Copies the contents of a file that contains exported registry subkeys, entries, and values into the registry of the local computer.
6	restore	REG RESTORE KeyName FileName	Writes saved subkeys and entries back to the registry.
	C:\Windows\system32>reg restore HKLM\SOFTWARE\phani1 c:/regkeybackup.reg The operation completed successfully.		
7	save	REG SAVE KeyName FileName [/y]	Saves a copy of specified subkeys, entries, and values of the registry in a specified file
	C:\Windows\system32>reg save HKLM\SOFTWARE\phani1 c:/regkeybackup.reg File c:/regkeybackup.reg already exists. Overwrite (Yes/No)?yes The operation completed successfully.		

## Service Commands

s. no	Command	Command usage	Description
1	Config	sc config	Configures service startup and login accounts
	<pre> C:\Windows\system32&gt;sc config DESCRIPTION:     Modifies a service entry in the registry and Service Database. USAGE:     sc &lt;server&gt; config [service name] &lt;option1&gt; &lt;option2&gt;...  OPTIONS: NOTE: The option name includes the equal sign.     A space is required between the equal sign and the value.     To remove the dependency, use a single / as dependency value. type= &lt;own share interact kernel filesys rec adapt userown usershare&gt; start= &lt;boot system auto demand disabled delayed-auto&gt; error= &lt;normal severe critical ignore&gt; binPath= &lt;BinaryPathName to the .exe file&gt; group= &lt;LoadOrderGroup&gt; tag= &lt;yes no&gt; depend= &lt;Dependencies(separated by / (forward slash))&gt; obj= &lt;AccountName ObjectName&gt; DisplayName= &lt;display name&gt; password= &lt;password&gt; </pre>		
2	Continue	sc continue	Resumes a paused service
	<pre> C:\Windows\system32&gt;sc continue DESCRIPTION:     Sends a CONTINUE control request to a service. USAGE:     sc &lt;server&gt; continue [service name] </pre>		

3	Enumdepend	sc enumdepend	Lists the services that cannot run unless the specified service is running
4	qc	sc qc	Displays the configuration of a particular service configuration of a particular service
	<pre> C:\Windows\system32&gt;sc qc DESCRIPTION:     Queries the configuration information for a service. USAGE:     sc &lt;server&gt; qc [service name] &lt;bufferSize&gt;  C:\Windows\system32&gt; </pre>		
5	Failure	sc failure	Specifies what action to take upon failure of the service
	<pre> C:\Windows\system32&gt;sc failure DESCRIPTION:     Changes the actions upon failure USAGE:     sc &lt;server&gt; failure [service name] &lt;option1&gt; &lt;option2&gt;...  OPTIONS:     reset=    &lt;Length of period of no failures (in seconds)                after which to reset the failure count to 0 (may be INFINITE)&gt;                (Must be used in conjunction with actions= )     reboot=   &lt;Message broadcast before rebooting on failure&gt;     command=  &lt;Command line to be run on failure&gt;     actions=  &lt;Failure actions and their delay time (in milliseconds),                separated by / (forward slash) -- e.g., run/5000/reboot/800                Valid actions are &lt;run restart reboot&gt; &gt;                (Must be used in conjunction with the reset= option) </pre>		

7	Pause	sc pause	Pauses a service
	<pre> C:\Windows\system32&gt;sc pause DESCRIPTION:     Sends a PAUSE control request to a service. USAGE:     sc &lt;server&gt; pause [service name] </pre>		
8	<b>"AtherosSvc"</b> <b>Click ctrl+shift+Esc to "Open Task Manager and Select Open Services"</b>	<b>Sc query" AtherosSvc "</b> <b>"AtherosSvc is Service Name"</b>	<b>Displays information about the specified service, driver, type of service, or type of driver</b>
	<pre> C:\Windows\system32&gt;sc query "AtherosSvc"  SERVICE_NAME: AtherosSvc         TYPE               : 10  WIN32_OWN_PROCESS         STATE                : 4   RUNNING                                 (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN)         WIN32_EXIT_CODE       : 0   (0x0)         SERVICE_EXIT_CODE   : 0   (0x0)         CHECKPOINT           : 0x0         WAIT_HINT            : 0x0 </pre>		
9	Start	sc start	Starts a service running
	<pre> C:\Windows\system32&gt; C:\Windows\system32&gt;sc start DESCRIPTION:     Starts a service running. USAGE:     sc &lt;server&gt; start [service name] &lt;arg1&gt; &lt;arg2&gt; ... </pre>		



10	Stop	sc stop	Sends a STOP request to a service (not all will respond)
	<pre>C:\Windows\system32&gt;sc stop DESCRIPTION:     Sends a STOP control request to a service. USAGE:     sc &lt;server&gt; stop [service name] &lt;reason&gt; &lt;comment&gt;     &lt;reason&gt; = Optional reason code number for service stop                formed with the following elements in the format:                 Flag:Major reason:Minor reason                 [E.g., 1:2:8 means Hardware: Disk (Unplanned)]                 Flag                -----                1    -   Unplanned                2    -   Custom                4    -   Planned                 Major reason                -----                1    -   Other                2    -   Hardware                3    -   Operating System                4    -   Software                5    -   Application                64-255 -   Custom                 Minor reason                -----                1    -   Other                2    -   Maintenance                3    -   Installation                4    -   Upgrade                5    -   Reconfiguration                6    -   Hung</pre>		



11	net start	net start	It shows a common service which is running on the system
	<pre> C:\Windows\system32&gt;net start These Windows services are started:  Adobe Acrobat Update Service AMD External Events Utility Application Host Helper Service Application Information AtherosSvc Background Tasks Infrastructure Service Base Filtering Engine Capability Access Manager Service Clipboard User Service_9dca1b CNG Key Isolation COM+ Event System Connected Devices Platform Service Connected Devices Platform User Service_9dca1b Connected User Experiences and Telemetry CoreMessaging Credential Manager Cryptographic Services Data Usage DCOM Server Process Launcher Device Association Service DHCP Client Diagnostic Policy Service Diagnostic Service Host Display Enhancement Service Display Policy Service Distributed Link Tracking Client </pre>		
12	"Service_name"	NET STOP "Service_name"	It stops the specific service which is running on the system which is running on the system
13	sfc /scannow	sfc /scannow	It scan the system with files and folders

## Network commands

s.no	Command	Command usage	Description
1	Ipconfig	Ipconfig	It will display IP address
	<pre>C:\Users\user&gt;ipconfig  Windows IP Configuration  Ethernet adapter Ethernet:      Media State . . . . . : Media disconnected     Connection-specific DNS Suffix  . :  Wireless LAN adapter Local Area Connection* 2:      Media State . . . . . : Media disconnected     Connection-specific DNS Suffix  . :  Wireless LAN adapter Local Area Connection* 3:      Media State . . . . . : Media disconnected     Connection-specific DNS Suffix  . :  Wireless LAN adapter Wi-Fi:      Connection-specific DNS Suffix  . :     Link-local IPv6 Address . . . . . : fe80::194:521:4d44:bda3%7     IPv4 Address. . . . . : 192.168.0.101     Subnet Mask . . . . . : 255.255.255.0     Default Gateway . . . . . : 192.168.0.1</pre>		

2	Ipconfig all	Ipconfig all	It will display all the windows ip configurations <ul style="list-style-type: none"> <li>➤ Host name</li> <li>➤ Mac / physical address.</li> </ul>
<pre> C:\Users\user&gt;ipconfig /all  Windows IP Configuration      Host Name . . . . . : DESKTOP-S7VJU50     Primary Dns Suffix . . . . . :     Node Type . . . . . : Hybrid     IP Routing Enabled. . . . . : No     WINS Proxy Enabled. . . . . : No  Ethernet adapter Ethernet:      Media State . . . . . : Media disconnected     Connection-specific DNS Suffix  . :     Description . . . . . : Realtek PCIe GBE Family Controller     Physical Address. . . . . : 50-7B-9D-47-E7-1B     DHCP Enabled. . . . . : Yes     Autoconfiguration Enabled . . . . : Yes  Wireless LAN adapter Local Area Connection* 2:      Media State . . . . . : Media disconnected     Connection-specific DNS Suffix  . :     Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter     Physical Address. . . . . : 78-0C-B8-29-5E-6A     DHCP Enabled. . . . . : Yes     Autoconfiguration Enabled . . . . : Yes  Wireless LAN adapter Local Area Connection* 3:      Media State . . . . . : Media disconnected     Connection-specific DNS Suffix  . :     Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #2     Physical Address. . . . . : 7A-0C-B8-29-5E-69     DHCP Enabled. . . . . : Yes     Autoconfiguration Enabled . . . . : Yes           </pre>			

3	nslookup	nslookup	It will give Domain Name Server (DNS) address,
	<pre> C:\Users\user&gt;nslookup Default Server: 192.168.0.1 Address: 192.168.0.1  &gt; www.python.org Server: 192.168.0.1 Address: 192.168.0.1  Non-authoritative answer: Name: dualstack.python.map.fastly.net Addresses: 2a04:4e42:25::223            151.101.156.223 Aliases: www.python.org  &gt; quit  C:\Users\user&gt; </pre>		
4	ping	ping <ip address>	It gives whether the given ip address exist or not, by sending packets 4 times, the time taken to transmission and reception, gives average time.
	<pre> C:\Users\user&gt;ping 151.101.156.223  Pinging 151.101.156.223 with 32 bytes of data: Reply from 151.101.156.223: bytes=32 time=26ms TTL=56 Reply from 151.101.156.223: bytes=32 time=29ms TTL=56 Reply from 151.101.156.223: bytes=32 time=25ms TTL=56 Reply from 151.101.156.223: bytes=32 time=26ms TTL=56  Ping statistics for 151.101.156.223:     Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),     Approximate round trip times in milli-seconds:         Minimum = 25ms, Maximum = 29ms, Average = 26ms  C:\Users\user&gt; </pre>		

5	tracert	tracert <ip address>	To provides, How much time & many hops/routers it travels to reach the destination ip address
	<pre>C:\Users\user&gt;tracert 151.101.156.223  Tracing route to 151.101.156.223 over a maximum of 30 hops    1    1 ms    1 ms    3 ms  192.168.0.1 [192.168.0.1]   2    2 ms    1 ms    1 ms  csp1.zte.com.cn [192.168.1.1]   3    3 ms    2 ms    2 ms  10.168.4.1 [10.168.4.1]   4    9 ms    9 ms   10 ms  61.95.191.189   5   27 ms   26 ms   25 ms  182.79.247.162   6   25 ms   26 ms   29 ms  182.79.247.161   7   87 ms   25 ms   32 ms  182.79.141.180   8   48 ms   26 ms   26 ms  167.82.128.128   9   27 ms   25 ms   26 ms  151.101.156.223  Trace complete.  C:\Users\user&gt;</pre>		