

Windows commands

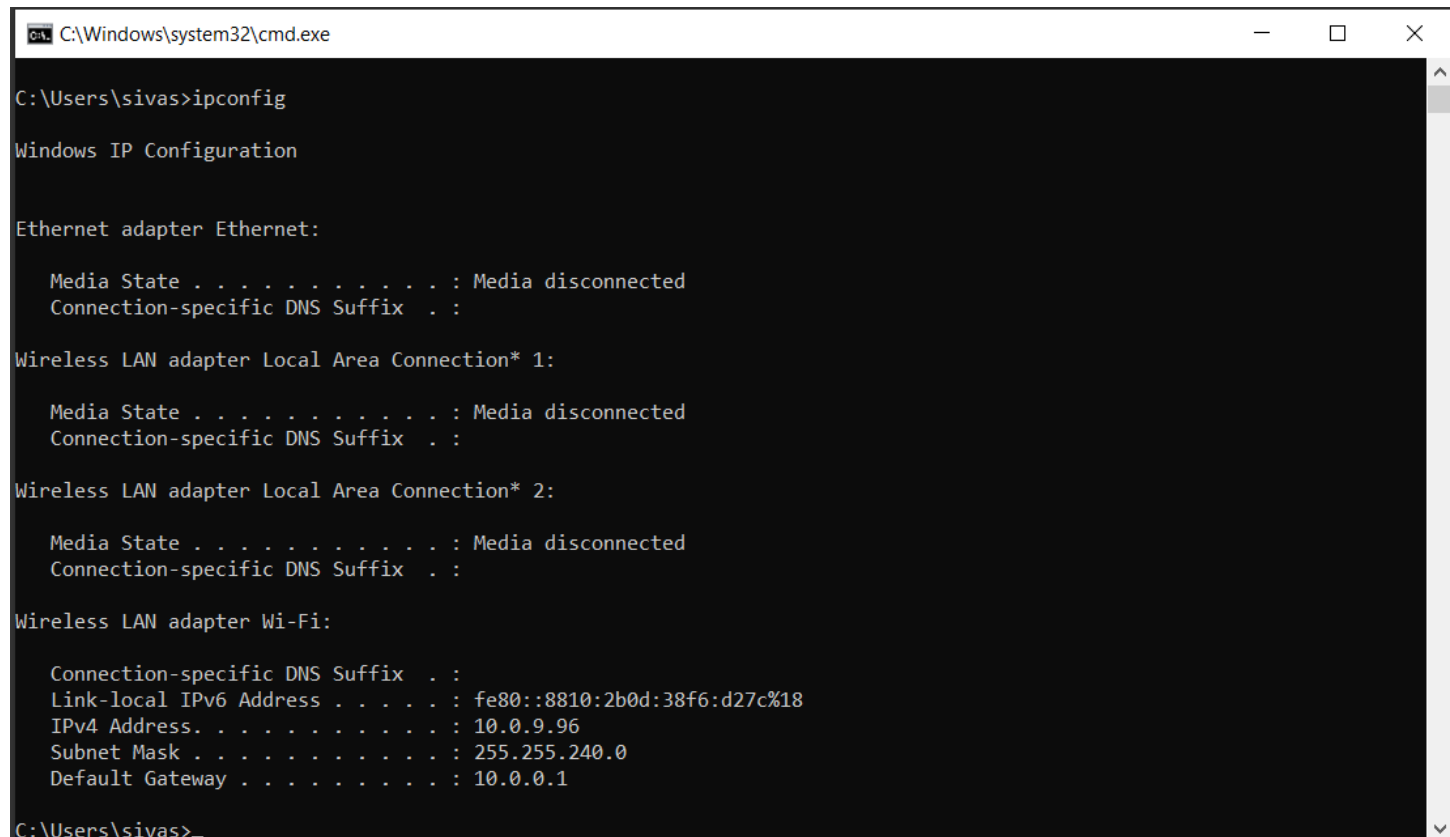
1. Ipconfig

Syntax: ipconfig

Function: cmd to show the NIC ip config and basic details.

More details: [Refer Microsoft Learn](#)

Example:

A screenshot of a Windows command prompt window. The title bar shows the path 'C:\Windows\system32\cmd.exe'. The command prompt shows the user 'C:\Users\sivas>' typing 'ipconfig'. The output displays 'Windows IP Configuration' followed by details for three network adapters: Ethernet adapter Ethernet (Media State: Media disconnected), Wireless LAN adapter Local Area Connection* 1 (Media State: Media disconnected), and Wireless LAN adapter Local Area Connection* 2 (Media State: Media disconnected). Below these, it shows details for the 'Wireless LAN adapter Wi-Fi', including its Connection-specific DNS Suffix, Link-local IPv6 Address (fe80::8810:2b0d:38f6:d27c%18), IPv4 Address (10.0.9.96), Subnet Mask (255.255.240.0), and Default Gateway (10.0.0.1). The prompt ends with 'C:\Users\sivas>'.

1.1 ipconfig /all

Syntax: ipconfig /all

Function: cmd to show the all NIC details.

1.2 ipconfig /flushdns

Syntax: ipconfig /flushdns

Function: cmd to clear the DNS cache.

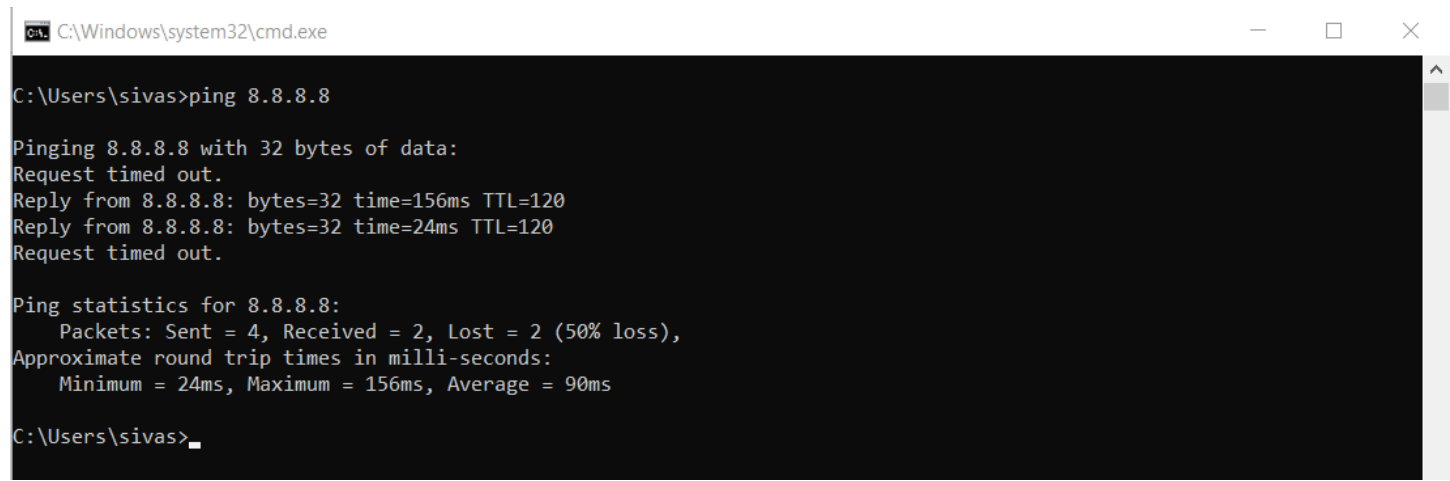
2. Ping

Syntax: ping [ip address]

Function: cmd to check whether the destination computer is reachable or not.

More details: [Refer Microsoft Learn](#)

Example:



```
C:\Windows\system32\cmd.exe

C:\Users\sivas>ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:
Request timed out.
Reply from 8.8.8.8: bytes=32 time=156ms TTL=120
Reply from 8.8.8.8: bytes=32 time=24ms TTL=120
Request timed out.

Ping statistics for 8.8.8.8:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 24ms, Maximum = 156ms, Average = 90ms

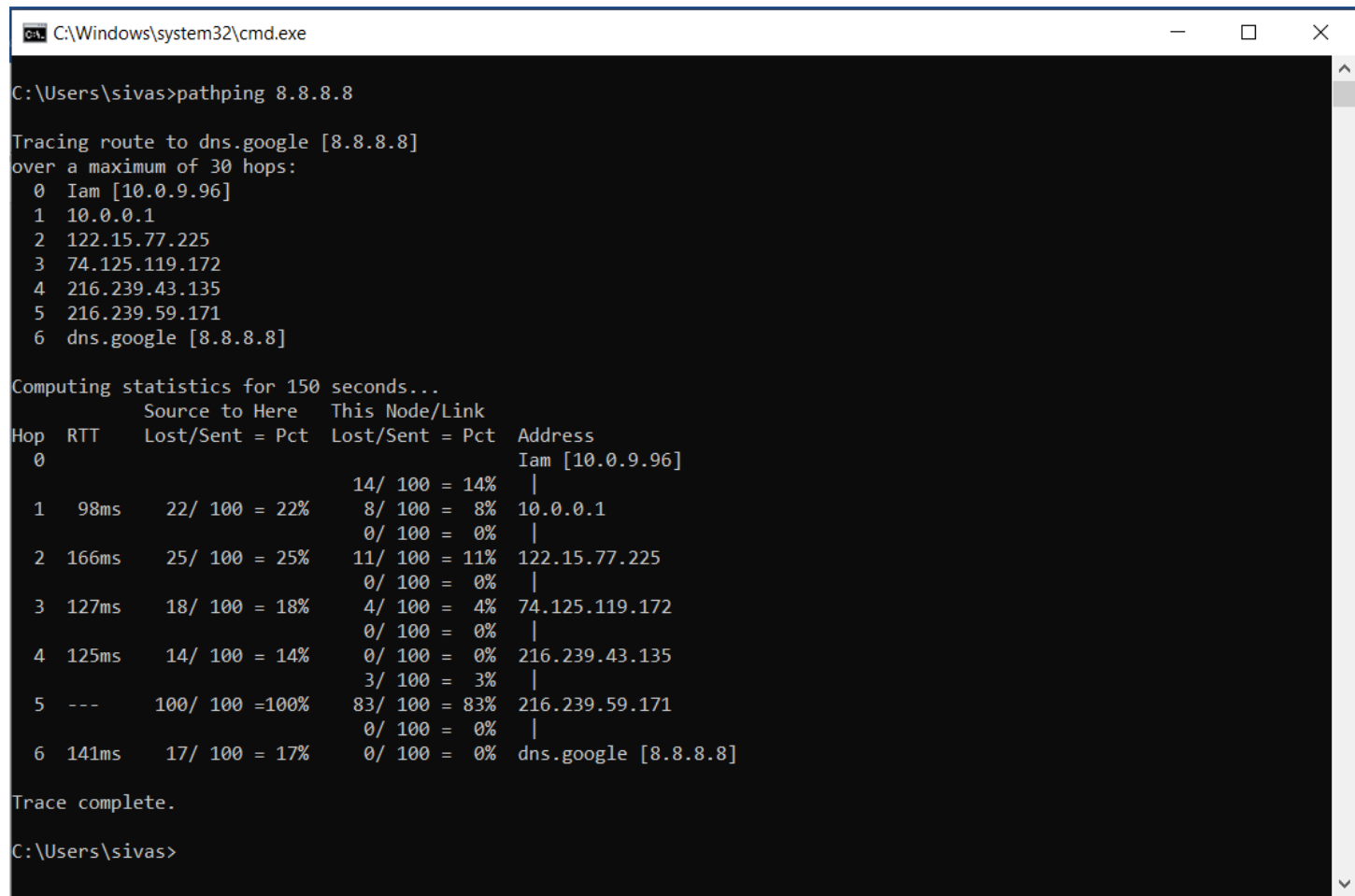
C:\Users\sivas>
```

3. Path ping

Syntax: pathping [ip address]

Function: cmd to check the packet loss and no of hops between source and destination.

More details: [Refer Microsoft Learn](#)

Example:


```

C:\Windows\system32\cmd.exe

C:\Users\sivas>pathping 8.8.8.8

Tracing route to dns.google [8.8.8.8]
over a maximum of 30 hops:
  0  Iam [10.0.9.96]
  1  10.0.0.1
  2  122.15.77.225
  3  74.125.119.172
  4  216.239.43.135
  5  216.239.59.171
  6  dns.google [8.8.8.8]

Computing statistics for 150 seconds...
Hop  RTT      Source to Here   This Node/Link   Address
     Lost/Sent = Pct Lost/Sent = Pct
  0                                     Iam [10.0.9.96]
  1  98ms     22/ 100 = 22%    14/ 100 = 14%    |
                                     10.0.0.1
  2  166ms    25/ 100 = 25%    8/ 100 = 8%     |
                                     122.15.77.225
  3  127ms    18/ 100 = 18%    0/ 100 = 0%     |
                                     74.125.119.172
  4  125ms    14/ 100 = 14%    0/ 100 = 0%     |
                                     216.239.43.135
  5  ---      100/ 100 =100%   3/ 100 = 3%     |
                                     216.239.59.171
  6  141ms    17/ 100 = 17%    0/ 100 = 0%     |
                                     dns.google [8.8.8.8]

Trace complete.

C:\Users\sivas>

```

4. Tracert**Syntax:** `tracert [ip address]`**Function:** cmd to check the hops and no of router between source and destination.**More details:** [Refer Microsoft Learn](#)**Example:**

```

C:\Windows\system32\cmd.exe

C:\Users\sivas>tracert 8.8.8.8

Tracing route to dns.google [8.8.8.8]
over a maximum of 30 hops:

  0  158 ms    4 ms     5 ms  10.0.0.1
  1  47 ms    347 ms   138 ms 122.15.77.225
  2  38 ms     *        *     74.125.119.172
  3  94 ms    158 ms   29 ms 216.239.43.135
  4  33 ms    34 ms    59 ms 216.239.59.171
  5  245 ms   357 ms   *     dns.google [8.8.8.8]
  6  141 ms   *        *     dns.google [8.8.8.8]
  7   *      *      74 ms dns.google [8.8.8.8]

Trace complete.

C:\Users\sivas>_

```

5. Nslookup

Syntax: nslookup

Syntax: nslookup [domain name]

Function: cmd to resolve the dns name to ip.

More details: [Refer Microsoft Learn](#)

Example:

```

C:\Windows\system32\cmd.exe - nslookup

C:\Users\sivas>nslookup
Default Server:  dns.google
Address:  8.8.8.8

> google.com
Server:  dns.google
Address:  8.8.8.8

DNS request timed out.
    timeout was 2 seconds.
Name:    google.com
Address:  2404:6800:4007:804::200e

> _

```

6. Wifi Qrcode generator

Syntax: new-qrcodewifiaccess -SSID "111" -Password "12345678" -outpath "C:/wifi.png"

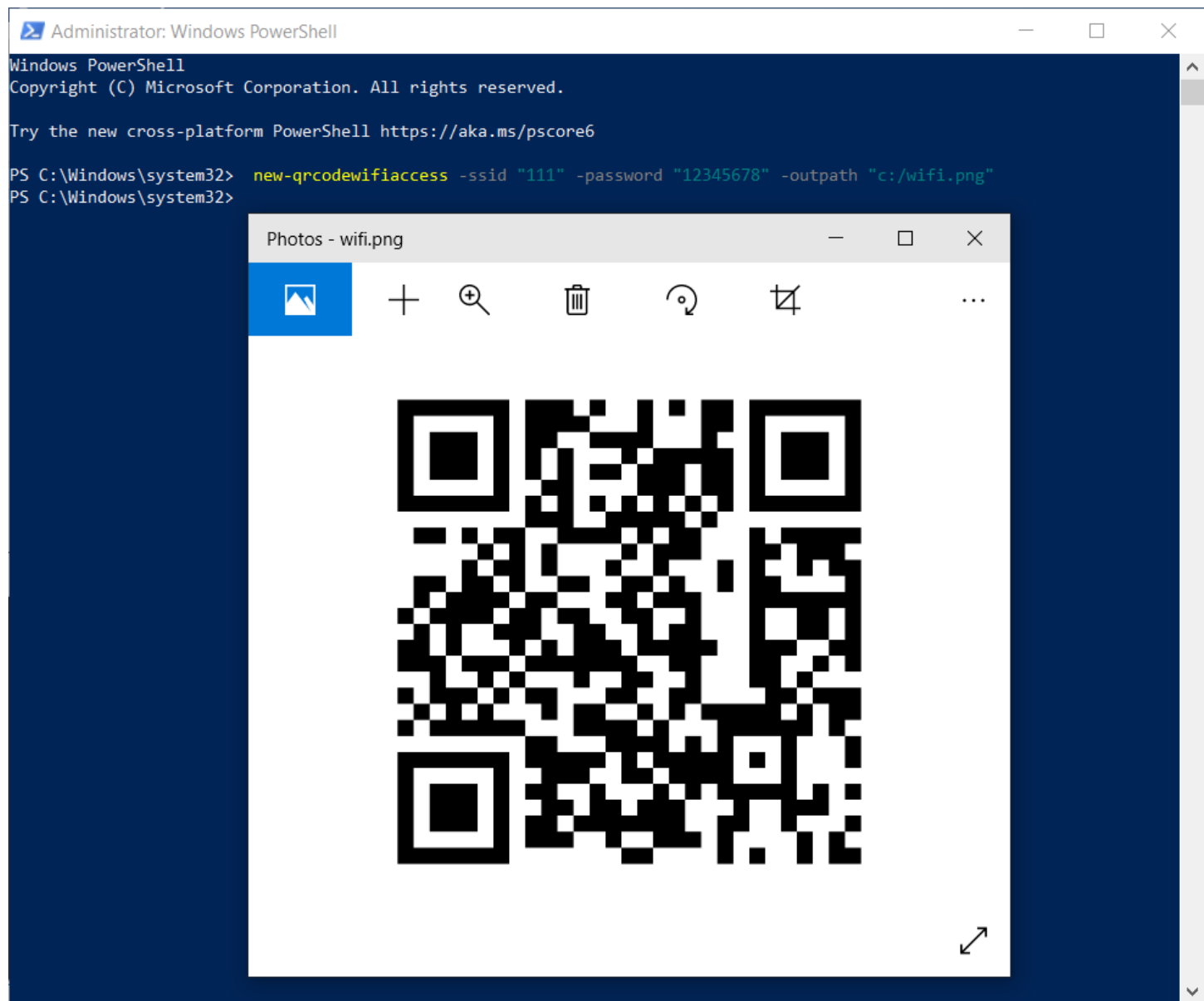
Function: cmd to genetrare wifi qrcode in powershell

Installation cmds: Install-Module -Name QRCodeGenerator

Import-Module QRCodeGenerator

More details: [Refer Generate QR Code with PowerShell in Windows 10](#)

Example:



7. Attrib Command

Syntax: attrib "folder_name" +s +h +r

Function: folder is hidden and isn't visible when we select to show all files and folders.

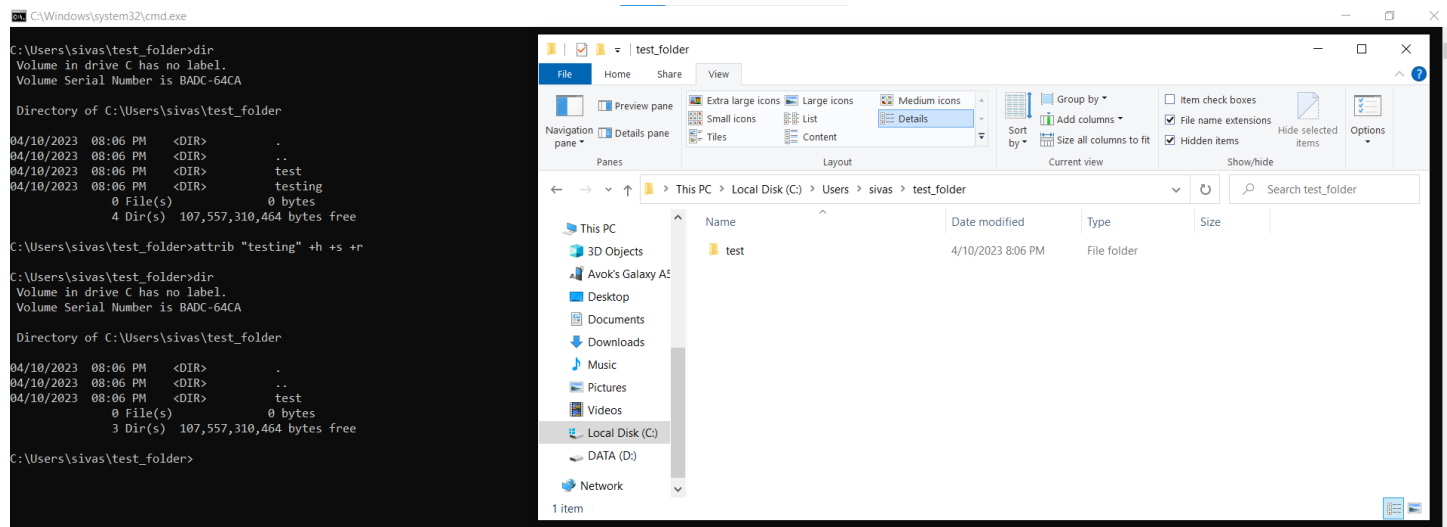
- s System
- h Hidden
- r Read-only

Syntax: attrib "folder_name" -s -h -r

Function: folder is visible when we select to show all files and folders.

More details: [Refer www.c-sharpcorner.com](http://www.c-sharpcorner.com)

Example:



8. Title

Syntax: title [string]

Function: To change the Command Prompt title.

More details: [Refer Microsoft Learn](https://learn.microsoft.com/en-us/windows/terminal/tutorials/terminal-basics)

Example:



9. Prompt

Syntax: prompt [text]

Function: To change executing path name in command prompt.

More details: [Refer Microsoft Learn](https://learn.microsoft.com/en-us/windows/terminal/tutorials/terminal-basics)

Example:

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.2728]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sivas>prompt SIVA

SIVAecho "hi"
"hi"

SIVA
```

10. Netsh

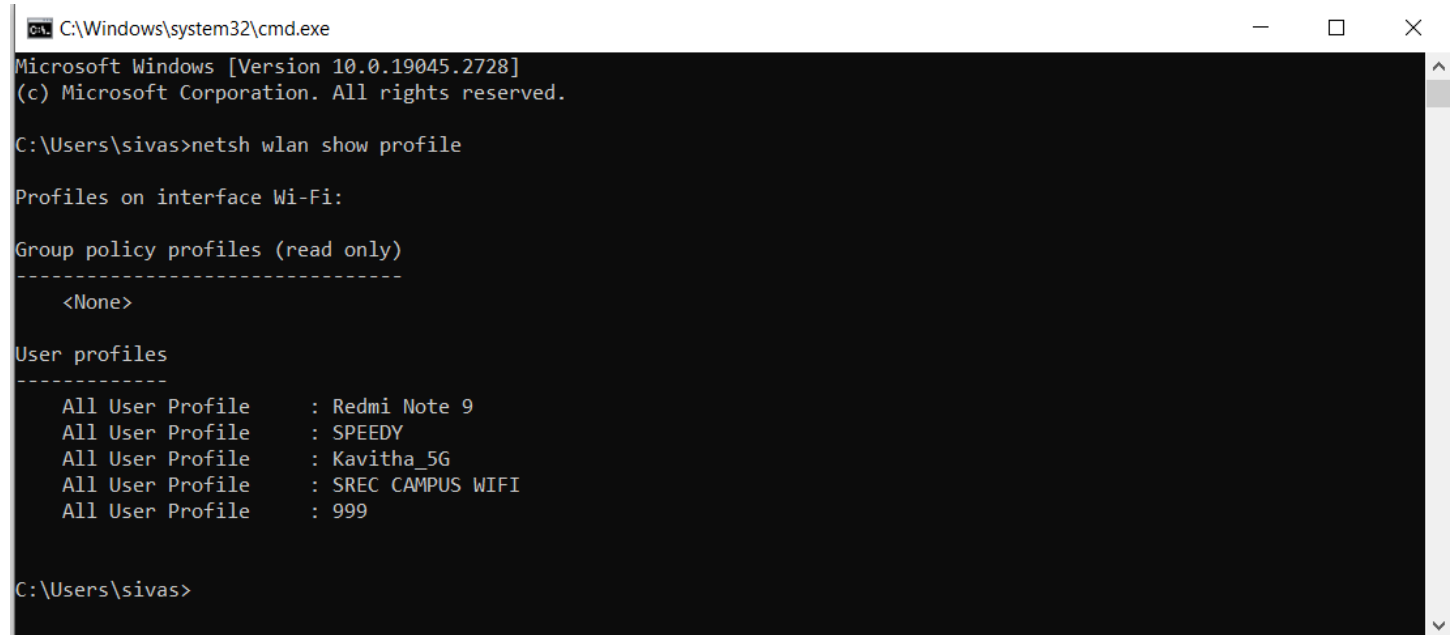
Syntax: netsh wlan show profile

Function: To show a list of network names that we already connect to.

Syntax: netsh wlan show profile name= "Wi-Fi name" key=clear

Function: To show the password of the given wi-fi name

More details: [Refer Microsoft Learn](#)

Example:

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.2728]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sivas>netsh wlan show profile

Profiles on interface Wi-Fi:

Group policy profiles (read only)
-----
    <None>

User profiles
-----
    All User Profile      : Redmi Note 9
    All User Profile      : SPEEDY
    All User Profile      : Kavitha_5G
    All User Profile      : SREC CAMPUS WIFI
    All User Profile      : 999

C:\Users\sivas>
```

```
C:\Windows\system32\cmd.exe

C:\Users\sivas>netsh wlan show profile "999" key=clear

Profile 999 on interface Wi-Fi:
=====

Applied: All User Profile

Profile information
-----
Version           : 1
Type              : Wireless LAN
Name              : 999
Control options   :
    Connection mode : Connect automatically
    Network broadcast : Connect only if this network is broadcasting
    AutoSwitch      : Do not switch to other networks
    MAC Randomization : Enabled

Connectivity settings
-----
Number of SSIDs    : 1
SSID name         : "999"
Network type      : Infrastructure
Radio type        : [ Any Radio Type ]
Vendor extension   : Not present

Security settings
-----
Authentication    : WPA2-Personal
Cipher            : CCMP
Authentication    : WPA2-Personal
Cipher            : GCMP
Security key      : Present
Key Content       : 12345678

Cost settings
-----
Cost              : Fixed
Congested         : No
Approaching Data Limit : No
Over Data Limit   : No
Roaming           : No
Cost Source       : Operator

C:\Users\sivas>
```

11.