# Windows commands

# 1. Ipconfig

## Syntax: ipconfig

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

More details: Refer Microsoft Learn

#### **Example:**

```
C:\Windows\system32\cmd.exe
                                                                                                         X
C:\Users\sivas>ipconfig
Windows IP Configuration
Ethernet adapter Ethernet:
  Media State . . . . . . . : Media disconnected
  Connection-specific DNS Suffix .:
Wireless LAN adapter Local Area Connection* 1:
  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 Wi-Fi:
   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
  Default Gateway . . . . . . . : 10.0.0.1
:\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

### Ping:

Syntax: ping <ip address>

**Function:** cmd to check weather 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>_
```

#### Ping with timestamp:

Syntax: ping -t <ip address> | Foreach{"{0} - {1}" -f (Get-Date),\$\_}

**Function:** it will work in PowerShell. Normal ping cmd show the reply details of the destination computer but cmd will show the replay with timestamp.

More details: Refer Spiceworks

```
Windows PowerShell
                                                                                                              X
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\sivas> ping -t 8.8.8.8|Foreach{"{0} - {1}" -f (Get-Date),$_}
05-07-2023 20:27:36 -
05-07-2023 20:27:36 - Pinging 8.8.8.8 with 32 bytes of data:
05-07-2023 20:27:36 - Reply from 8.8.8.8: bytes=32 time=22ms TTL=118
05-07-2023 20:27:37 - Reply from 8.8.8.8: bytes=32 time=22ms TTL=118
05-07-2023 20:27:38 - Reply from 8.8.8.8: bytes=32 time=21ms TTL=118
05-07-2023 20:27:39 - Reply from 8.8.8.8: bytes=32 time=21ms TTL=118
05-07-2023 20:27:40 -
                     Reply from 8.8.8.8: bytes=32 time=21ms TTL=118
05-07-2023 20:27:41 - Reply from 8.8.8.8: bytes=32 time=21ms TTL=118
05-07-2023 20:27:42 - Reply from 8.8.8.8: bytes=32 time=22ms TTL=118
05-07-2023 20:27:43 - Reply from 8.8.8.8: bytes=32 time=21ms TTL=118
05-07-2023 20:27:44 - Reply from 8.8.8.8: bytes=32 time=21ms TTL=118
```

## 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:

```
X
 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:
    Iam [10.0.9.96]
10.0.0.1
    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...
           Source to Here
                            This Node/Link
           Lost/Sent = Pct Lost/Sent = Pct
Нор
                                             Address
                                             Iam [10.0.9.96]
                              14/ 100 = 14%
             22/ 100 = 22%
     98ms
                               8/ 100 = 8%
                                             10.0.0.1
                               0/ 100 = 0%
                              11/ 100 = 11%
 2 166ms
             25/ 100 = 25%
                                             122.15.77.225
                               0/ 100 = 0%
                               4/ 100 = 4%
 3 127ms
             18/ 100 = 18%
                                             74.125.119.172
                               0/ 100 = 0%
 4 125ms
             14/ 100 = 14%
                               0/ 100 = 0%
                                             216.239.43.135
                               3/ 100 = 3%
            100/ 100 =100%
                              83/ 100 = 83%
                                             216.239.59.171
                                  100 =
                                         0%
             17/ 100 = 17%
                               0/ 100 = 0%
                                             dns.google [8.8.8.8]
 6 141ms
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

```
C:\Windows\system32\cmd.exe
                                                                                                                       \times
C:\Users\sivas>tracert 8.8.8.8
Tracing route to dns.google [8.8.8.8]
over a maximum of 30 hops:
     158 ms
                4 ms
                         5 ms 10.0.0.1
      47 ms
              347 ms
                       138 ms 122.15.77.225
      38 ms
                               74.125.119.172
      94 ms
              158 ms
                        29 ms 216.239.43.135
      33 ms
               34 ms
                        59 ms 216.239.59.171
     245 ms
              357 ms
                               dns.google [8.8.8.8]
                               dns.google [8.8.8.8]
     141 ms
                        74 ms dns.google [8.8.8.8]
Trace complete.
C:\Users\sivas>_
```

# 5. 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** "<wifi name>" **-Password** "<wifi password>" **-outpath** "<file path location to save file>"

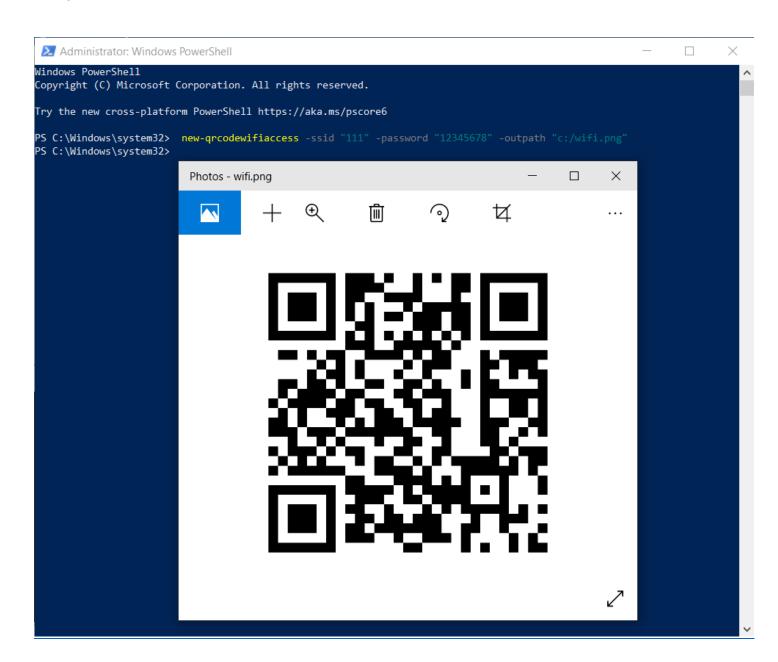
Function: cmd to genetrate wifi qrcode in powershell

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.

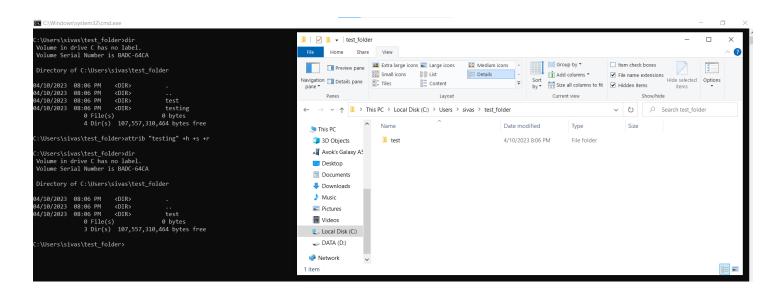
- **s** System
- **h** Hidden
- r Read-only

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

**Example:** 



### 8. Title

Syntax: title <string>

Function: To change the Command Prompt title.

More details: Refer Microsoft Learn

**Example:** 



#### 9. Prompt

Syntax: prompt <text>

**Function:** To change executing path name in command prompt.

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>prompt SIVA

SIVAecho "hi"
"hi"

SIVA
```

## 10. Netsh wifi password

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

```
C:\Windows\system32\cmd.exe
                                                                                                              X
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
                       : SREC CAMPUS WIFI
    All User Profile
    All User Profile
                        : 999
C:\Users\sivas>
```



### 11. Manage-bde Bitlocker

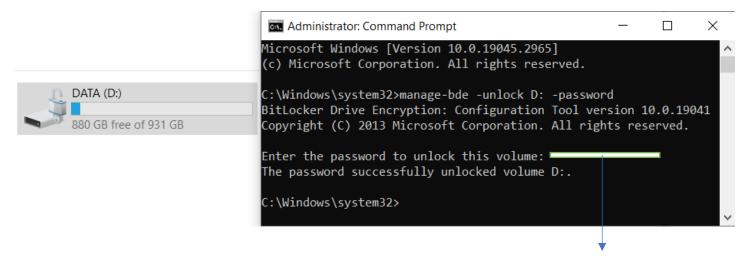
#### Unlock:

Syntax: Manage-bde -unlock <drive letter>: -password

**Function:** run command prompt in Admin mode to unlock the bitlocker drive.

More details: Refer Microsoft Learn

**Example:** 



Here enter the password of Bitlocker dirve.

#### Lock:

#### Syntax: Manage-bde -lock <drive letter>:

**Function:** run command prompt in Admin mode to lock the bitlocker drive. If any application or file is opened in that drive location it will not lock.

More details: Refer Microsoft Learn



#### Force lock:

### Syntax: Manage-bde -lock <drive letter>: -forcedismount

**Function:** run command prompt in Admin mode to lock the bitlocker drive. If any application or file is opened in that drive location then also it will lock the drive.

More details: Refer Microsoft Learn

### **Example:**



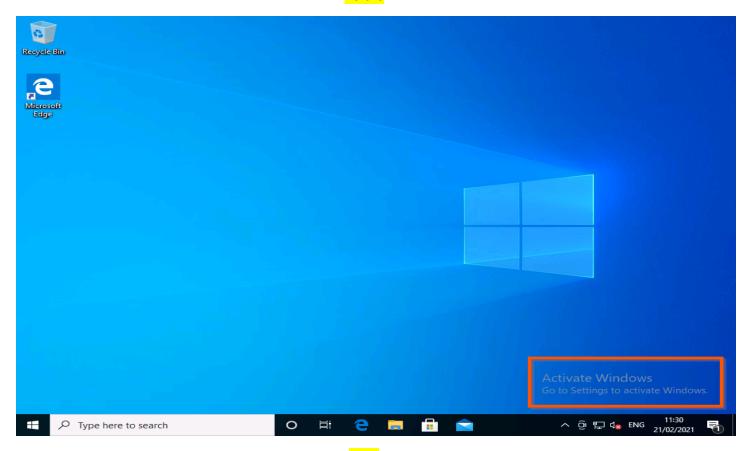
## 12. Activate Windows watermark temporary remove

### Syntax: bcdedit -set TESTSIGNING OFF

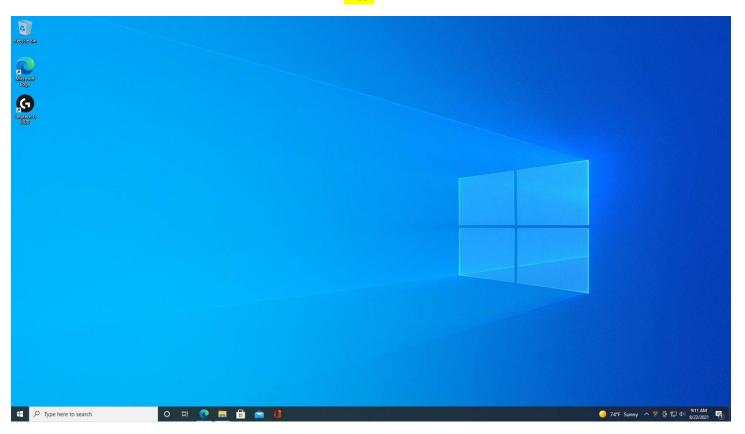
**Function:** run command prompt in Admin mode, enter the command and reboot the computer. use this command to temporarily hide the Activate Windows watermark.

More details: I find in YT

# <mark>Before</mark>







### 13. Display the content of a file in Command Prompt

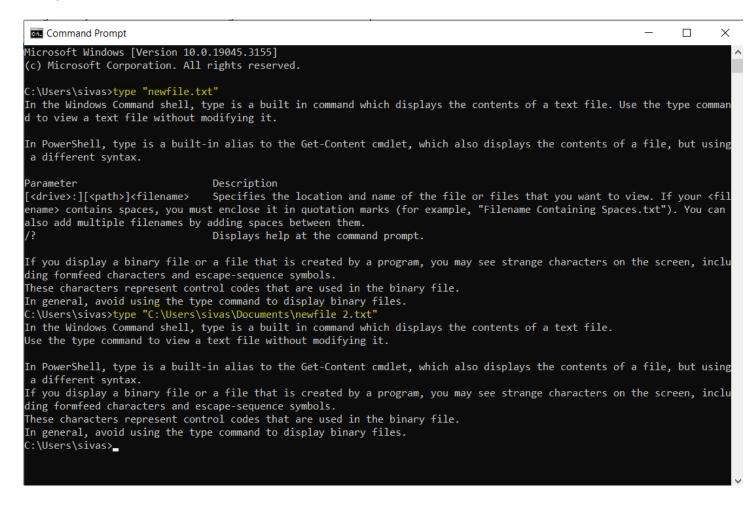
### Type:

Syntax: type "[<drive>:] [<path>] <file name.extension>"

**Function:** To view a text file without modifying it and show the file content in the CMD prompt. It show's the particular line of the file. Use MORE cmd with pipe symbol now it shows all the line in the large file.

More details: Refer Microsoft Learn

#### **Example:**



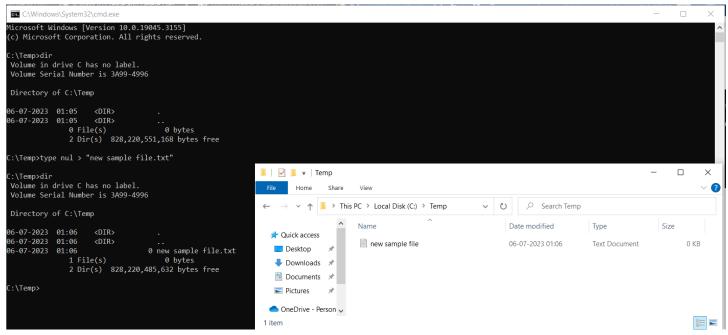
#### 14. Create and Delete files and directories form windows command prompt

#### Create empty file:

Syntax: type nul > <filename.extension>

**Function:** it create the empty file in using command prompt.

More details: Refer wikihow

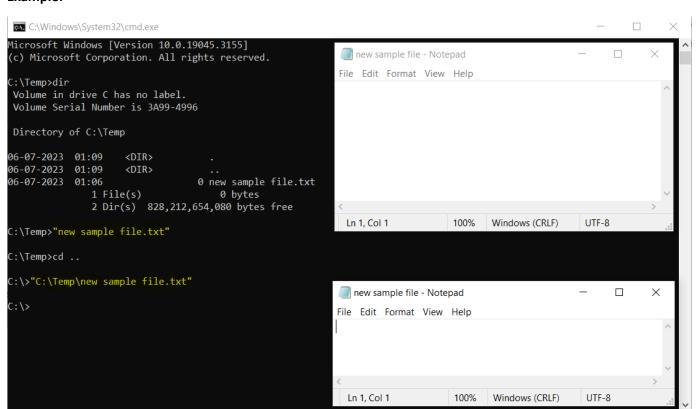


# 15. Open files using command prompt

**Syntax:** "[<drive>:] [<path>] <filename.extension>"

**Function:** type the file path in command to open any type of file using command prompt with default application which is installed in computer.

More details: Google Search



# 16. Command output save to a file using Command Prompt and PowerShell

# **Using Command Prompt:**

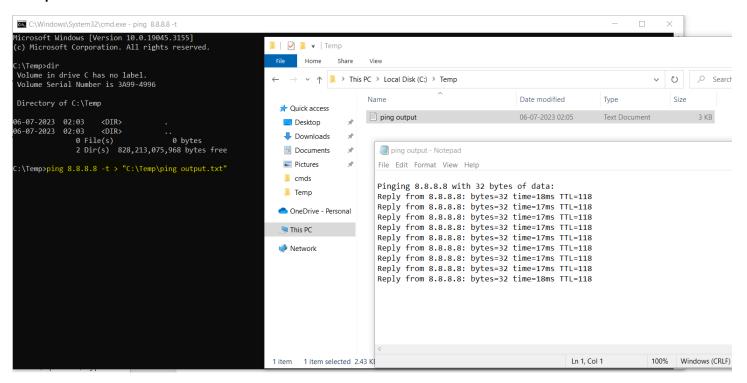
### Create new output file:

Syntax: <your-command> > "[<drive>:] [<path>] <filename.extension>"

**Function:** command to save the command output to a text file. > is the symbol for create a new text file or over write in existing file to save the output.

More details: Refer Windows Central

### **Example:**



### Continue output in existing file:

Syntax: <your-command> >> "[<drive>:] [<path>] <filename.extension>"

**Function: :** command to save the command output to a text file. >> is the symbol for write existing file to save the output.

More details: Refer Windows Central

#### Windows commands

