#### 1. arp -a

#### **Description:**

#### Output:

C:\Users\shrut> arp -a

Interface: 192.168.29.205 --- 0x8

Internet Address	Physical Address	Type
192.168.29.1	f0-ed-b8-68-b0-69	dynamic
192.168.29.255	ff-ff-ff-ff-ff	static
224.0.0.22	01-00-5e-00-00-16	static
224.0.0.251	01-00-5e-00-00-fb	static
224.0.0.252	01-00-5e-00-00-fc	static
239.255.255.250	01-00-5e-7f-ff-fa	static
255.255.255.255	ff-ff-ff-ff-ff	static

#### 2. hostname

**Description:** 

#### **Output:**

C:\Users\shrut> hostname
WIN-SHRU

#### 3. ipconfig

**Description:** 

#### **Output:**

```
C:\Users\shrut> ipconfig
Wireless LAN adapter Wi-Fi:
    Connection-specific DNS Suffix .:
    IPv6 Address.....: 2405:201:801b:1867:dda6:f9f1:8aa8:a812
    Temporary IPv6 Address.....:2405:201:801b:1867:
dc35:6cb0:601f:4d4f
    Link-local IPv6 Address.....: fe80::57bc:196:bd3a:d0f5%8
    IPv4 Address.....: 192.168.29.205
    Subnet Mask .....: 255.255.255.0
Default Gateway....: fe80::f2ed:b8ff:fe68:b069%8192.168.29.1
```

#### 4. ipconfig /all

#### **Description:**

#### **Output:**

```
C:\Users\shrut> ipconfig /all
 Windows IP Configuration
    Host Name . . . . . . . . : WIN-SHRU
    Primary Dns Suffix . . . . . :
    Node Type . . . . . . . . : Mixed
    IP Routing Enabled. . . . . . : No
    WINS Proxy Enabled. . . . . . . No
 Ethernet adapter Ethernet:
    Media State . . . . . . . . . . . Media disconnected
    Connection-specific DNS Suffix .:
    Description . . . . . . . . : Realtek PCIe FE Family Controller
    Physical Address. . . . . . . . . . . . . . . . 98-E7-43-4A-7C-25
    DHCP Enabled. . . . . . . . : Yes
    Autoconfiguration Enabled . . . : Yes
 Wireless LAN adapter Local Area Connection* 1:
    Media State . . . . . . . : Media disconnected
    Connection-specific DNS Suffix .:
    Description . . . . . . . . . : Microsoft Wi-Fi Direct Virtual Adapter
    Physical Address. . . . . . . . . 4E-EB-BD-AD-FA-A3
    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 #2
    Physical Address. . . . . . . . . . . . 5E-EB-BD-AD-FA-A3
    DHCP Enabled. . . . . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes
 Wireless LAN adapter Wi-Fi:
    Connection-specific DNS Suffix .:
    Description . . . . . . . . . . . . Qualcomm QCA9377 802.11ac Wireless Adapter
    Physical Address. . . . . . . . . . 4C-EB-BD-AD-FA-A3
    DHCP Enabled....: Yes
    Autoconfiguration Enabled . . . . : Yes
    Temporary IPv6 Address. . . . . : 2405:201:801b:1867:dc35:6cb0:601f:4d4f(Preferred)
    Link-local IPv6 Address . . . . : fe80::57bc:196:bd3a:d0f5%8(Preferred)
    IPv4 Address. . . . . . . . . . . . . . . . 192.168.29.205(Preferred)
    Lease Expires . . . . . . . . : 02 March 2025 11:51:15
    Default Gateway . . . . . . : fe80::f2ed:b8ff:fe68:b069%8
```

192,168,29,1

192.168.29.1

DHCPv6 Client DUID. . . . . . . : 00-01-00-01-2E-CC-5A-1B-98-E7-43-4A-7C-25

DNS Servers . . . . . . . . . . . . . . . . 2405:201:801b:1867::c0a8:1d01

DHCP Server . . . . . . . . . . . . . . . . 192.168.29.1 DHCPv6 IAID . . . . . . . . . . . . . . . 105704381

# 5. ipconfig/renewDescription:

#### **Output:**

C:\Users\shrut> ipconfig /renew
Windows IP Configuration

Ethernet adapter Ethernet Instance 0:

```
Connection-specific DNS Suffix .:
```

Link-local IPv6 Address . . . . : fe80::a6b1:43cf:9495:9d85%9

# 6. ipconfig/releaseDescription:

#### **Output:**

C:\Users\shrut> ipconfig /release
Windows IP Configuration

Ethernet adapter Ethernet Instance 0:

```
Connection-specific DNS Suffix .:
```

Link-local IPv6 Address . . . . : fe80::a6b1:43cf:9495:9d85%9

Default Gateway . . . . . . . :

7. ipconfig/flushdns
Description:

# Output:

C:\Users\shrut> ipconfig /flushdns

# 8. netdiag

**Description:** 

## **Output:**

C:\Users\shrut> netdiag

#### 9. netstat

**Description:** 

## **Output:**

C:\Users\shrut> netstat

Active Connections

Proto	Local Address	Foreign Address	State	
TCP	192.168.29.205:51323	202:4070	ESTABLISHED	
TCP	192.168.29.205:51773	20.50.73.13:https	ESTABLISHED	
TCP	192.168.29.205:51788	20.37.198.118:https	ESTABLISHED	
TCP	192.168.29.205:51789	52.182.141.63:https	ESTABLISHED	
TCP	[2405:201:801b:1867:do	:35:6cb0:601f:4d4f]:5071	4 [2603:1040:a06:6::2]:htt	ps ESTABLISH
TCP	[2405:201:801b:1867:do	:35:6cb0:601f:4d4f]:5073	4 [2603:1040:a06:6::2]:htt	ps ESTABLISH
TCP	[2405:201:801b:1867:do	:35:6cb0:601f:4d4f]:5083	0 [2603:1040:a06:6::2]:htt	ps ESTABLISH
TCP	Γ2405:201:801b:1867:do	:35:6cb0:601f:4d4fl:5083	8 sc-in-xbc:5228 E	STABLISHED

#### 10. nslookup

#### **Description:**

#### **Output:**

C:\Users\shrut> nslookup www.google.com

Server: reliance.reliance

Address: 2405:201:801b:1867::c0a8:1d01

Non-authoritative answer:

Name: www.google.com

Addresses: 2404:6800:4002:81e::2004

142.250.192.132

#### 11. ping

#### **Description:**

#### **Output:**

C:\Users\shrut> ping <a href="www.google.com">www.google.com</a>

```
Pinging www.google.com [2404:6800:4009:82b::2004] with 32 bytes of
data:
Reply from 2404:6800:4009:82b::2004: time=46ms
Reply from 2404:6800:4009:82b::2004: time=46ms
Reply from 2404:6800:4009:82b::2004: time=47ms
Reply from 2404:6800:4009:82b::2004: time=47ms

Ping statistics for 2404:6800:4009:82b::2004:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 46ms, Maximum = 47ms, Average = 46ms
```

#### 12. route

#### **Description:**

### **Output:**

C:\Users\shrut> route print

Interface List

15...98 e7 43 4a 7c 25 .....Realtek PCIe FE Family Controller

12...4e eb bd ad fa a3 .....Microsoft Wi-Fi Direct Virtual Adapter

3...5e eb bd ad fa a3 .....Microsoft Wi-Fi Direct Virtual Adapter #2

8...4c eb bd ad fa a3 .....Qualcomm QCA9377 802.11ac Wireless Adapter

1...........Software Loopback Interface 1

#### IPv4 Route Table

Active Routes:				
Network Destination	n Netmask	Gateway	Interface	Metric
0.0.0.0	0.0.0.0	192.168.29.1	192.168.29.205	35
127.0.0.0	255.0.0.0	On-link	127.0.0.1	331
127.0.0.1	255.255.255.255	On-link	127.0.0.1	331
127.255.255.255	255.255.255.255	On-link	127.0.0.1	331
192.168.29.0	255.255.255.0	On-link	192.168.29.205	291
192.168.29.205	255.255.255.255	On-link	192.168.29.205	291
192.168.29.255	255.255.255.255	On-link	192.168.29.205	291
224.0.0.0	240.0.0.0	On-link	127.0.0.1	331
224.0.0.0	240.0.0.0	On-link	192.168.29.205	291
255.255.255.255	255.255.255.255	On-link	127.0.0.1	331
255.255.255.255	255.255.255.255	On-link	192.168.29.205	291

#### IPv6 Route Table

	ive Rou		
Ιf	Metric	Network Destination	Gateway
8	51	::/0	fe80::f2ed:b8ff:fe68:b069
1	331	::1/128	On-link
8	51	2405:201:801b:1867::/64	On-link
8	291	2405:201:801b:1867:dc35:6cb0:601f:4d4f/128	
			On-link
8	291	2405:201:801b:1867:dda6:f9f1:8aa8:a812/128	
			On-link
8	291	fe80::/64	On-link
8	291	fe80::57bc:196:bd3a:d0f5/128	
			On-link
1	331	ff00::/8	On-link
8	291	ff00::/8	On-link

Persistent Routes:

None

#### 13. tracert

### **Description:**

#### **Output:**

C:\Users\shrut> tracert www.google.com

```
Tracing route to www.google.com [2404:6800:4009:811::2004] over a maximum of 30 hops:
```

```
1
       2 ms
                2 ms
                         2 ms
                               2405:201:801b:1867:f2ed:b8ff:fe68:b069
 2
                                Request timed out.
 3
       8 ms
                7 ms
                         7 ms
                                2405:200:801:500::71
                                Request timed out.
 4
 5
       4 ms
                6 ms
                               2405:200:816:3168:61::4
                                Request timed out.
 6
 7
                               2405:200:801:500::caa
       7 ms
                5 ms
                         6 ms
       *
                *
                         *
 8
                                Request timed out.
 9
      89 ms
                7 ms
                         7 ms
                               2405:200:100::1:0:59e
10
      *
                         *
                                Request timed out.
       *
                         *
11
                                Request timed out.
                *
12
      29 ms
                        30 ms
                                2404:6800:80a3::1
13
      29 ms
               28 ms
                        30 ms
                               2001:4860:0:1::168c
14
      31 ms
               31 ms
                        28 ms 2001:4860:0:1::78c0
15
      28 ms
                        37 ms
                               2001:4860::9:4001:67bd
               31 ms
     63 ms
               49 ms
16
                        56 ms 2001:4860::9:4001:7734
```

#### 14. pathping

#### **Description:**

### **Output:**

C:\Users\shrut> pathping www.google.com