

# Mini Project Report: Network Scanning using Nmap

## Objective:

The goal of this mini project was to learn basic network scanning using the powerful tool Nmap. The purpose was to discover active hosts, open ports, and services running on a target machine or network.

## Target Scanned:

I scanned my local machine and devices on my private network using Nmap. The IP address used for the scan was my own system's IP, which helps ensure that I practice ethically and legally.

## Tools Used:

- Nmap (Network Mapper)

- Kali Linux

- Windows Command Prompt

## Screenshots of Commands:

Screenshots on Command Prompt:

Identifying my local network IP using ipconfig.

```
Microsoft Windows [Version 10.0.19045.5854]
(c) Microsoft Corporation. All rights reserved.

C:\Users\██████ ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:
  Media State . . . . . : Media disconnected
  Connection-specific DNS Suffix . :

Ethernet adapter Ethernet 2:
  Connection-specific DNS Suffix . :
  Link-local IPv6 Address . . . . . : fe80::26d0:8aff%2
  IPv4 Address . . . . . : 192.168.1.1
  Subnet Mask . . . . . : 255.255.255.0
  Default Gateway . . . . . :

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 . :
  IPv6 Address . . . . . : 26d0:8aff:fe2c:2b01%19
  Temporary IPv6 Address . . . . . : 26d0:8aff:fe2c:2b01%19
  Link-local IPv6 Address . . . . . : fe80::26d0:8aff%19
  IPv4 Address . . . . . : 192.168.1.1
  Subnet Mask . . . . . : 255.255.255.0
  Default Gateway . . . . . : fe80::26d0:8aff%19
  192.168.1.1

C:\Users\██████
```

Ran different Nmap scan types: - Ping scan: nmap -sP 192.168.1.0/24

```
C:\Users\... nmap -sP 192.168.1.0/24
Starting Nmap 7.95 ( https://nmap.org ) at 2025-05-22 14:53 India Standard Time
Nmap scan report for Unit (192.168.1.1)
Host is up (0.0004s latency).
MAC Address: 24:DE:8A:2C:2B:01 (Unknown)
Nmap scan report for 192.168.1.2
Host is up (0.003s latency).
MAC Address: 96:67:EC:AF:39:3A (Unknown)
Nmap scan report for 192.168.1.7
Host is up (0.004s latency).
MAC Address: A8:93:4A:C6:5B:07 (Chongqing Fugui Electronics)
Nmap scan report for 192.168.1.3
Host is up.
Nmap done: 256 IP addresses (4 hosts up) scanned in 3.22 seconds

C:\Users\...>
```

- Port scan and Service scan : nmap -sV 192.168.1.1-20

```

[+] Command Prompt
SF=28<body></n><x20><x20ch1>403</x20Forbidden</h1><n><x20</body></n></html><n>
SF=(FourOhFourRequest, 290, "HTTP/1.0")<x2844><x200t><x20found></n>Content-Typ
SF=e:<x20text/html></n>Cache-Control:<x20no-store,max-age=0></n>X-Frame-Opti
SF=coms:<x20DHTML></n>Content-Type:options:<x20nosniff></n>X-XSS-Protection:
SF=<x201;</x20mode:block></n>strict-Transport-Security:<x20max-age=7776000;>
SF=<x20includeSubdomains></n>Content-Length:<x20441></n>Connection:<x20close>
SF=</n>Date:<x20Thu, x2022,x2022><x20May,x202025><x2009-26><x2009T></n></n></xml>
SF=<x20version:>"1.0"</x20encoding:>"iso-8859-1"</?><!DOCTYPE html><x20html><x2
SF=<x20PUBLIC>"></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20>
SF=<x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20>
SF=<x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20>
SF=<x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20></x20>
MAC Address: 24:D6:8A:2C:2B:01 (Unknown)

Nmap scan report for 192.168.1.2
Host is up (0.074s latency).
All 1000 scanned ports on 192.168.1.2 are in ignored states.
Not shown: 1000 closed tcp ports (reset)
MAC Address: [REDACTED] (Chongqing Fugui Electronics)

Nmap scan report for 192.168.1.7
Host is up (0.29s latency).
All 1000 scanned ports on 192.168.1.7 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: [REDACTED] (Chongqing Fugui Electronics)

Nmap scan report for 192.168.1.3
Host is up (0.0021s latency).
Not shown: 995 closed tcp ports (reset)
PORT      STATE SERVICE          VERSION
135/tcp    open  msrpc           Microsoft Windows RPC
445/tcp    open  microsoft-ds?  Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
5357/tcp   open  http            Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
7070/tcp   open  ssl/realserver?
0990/tcp   open  tcpwrapped

Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 20 IP addresses (4 hosts up) scanned in 219.27 seconds

C:\Users\[REDACTED]>
```

- Aggressive scan: nmap -A 192.168.X.X

```

[+] Command Prompt
C:\Users\[REDACTED]>nmap -A 192.168.1.3
Starting Nmap 7.95 ( https://nmap.org ) at 2025-05-22 14:59 India Standard Time
Nmap scan report for 192.168.1.3
Host is up (0.00030s latency).
Not shown: 993 closed tcp ports (reset)
PORT      STATE SERVICE          VERSION
135/tcp    open  msrpc           Microsoft Windows RPC
139/tcp    open  netbios-ssn     Microsoft Windows netbios-ssn
445/tcp    open  microsoft-ds?  Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
5357/tcp   open  http            Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-title: Service Unavailable
|_http-server-header: Microsoft-HTTPAPI/2.0
7070/tcp   open  ssl/realserver?
|_ssl-date: TLS randomness does not represent time
|_ssl-cert: Subject: commonName=AnyDesk Client
| Not valid before: 2024-12-01T03:58:09
| Not valid after:  2074-11-19T03:58:09
0990/tcp   open  tcpwrapped

6992/tcp   open  http            Intel Active Management Technology User Notification Service httpd 11.8.60.3561
|_http-server-header: Intel(R) Active Management Technology 11.8.60.3561
| http-title: IntelReg; Active Management Technology
|_Requested resource was /logon.htm
Device type: general purpose
Running:
OS CPU: [REDACTED]
OS details: [REDACTED]
Network Distance: 0 hops
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows, cpe:/h:intel:active_management_technology:11.8.60.3561

Host script results:
|_clock-skew: -1s
| smb2-security-mode:
|_ 0
|- Message signing enabled but not required
| smb2-time:
|_ date: 2025-05-22T09:30:13
|_ start_date: N/A

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 41.60 seconds

C:\Users\[REDACTED]
```

Screenshots on Kali Linux:

Identifying my local network IP using ifconfig.

```
File Actions Edit View Help
[~] $ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet [REDACTED] netmask 255.255.255.0 broadcast 10.0.2.255
        inet6 [REDACTED] prefixlen 64 scopeid 0x20<link>
        inet6 [REDACTED] prefixlen 64 scopeid 0x0<global>
        inetc [REDACTED] prefixlen 64 scopeid 0x0<global>
    ether [REDACTED] txqueuelen 1000 (Ethernet)
    RX packets 9 bytes 3723 (3.6 Kib)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 30 bytes 4974 (4.8 Kib)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet [REDACTED] netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
        loop txqueuelen 1000 (Local Loopback)
    RX packets 8 bytes 480 (480.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 8 bytes 480 (480.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[~] $
```

Ran different Nmap scan types: - Ping scan: nmap -sP 192.168.1.0/24

```
File Actions Edit View Help
[~] $ nmap -sP 192.168.1.0/24
Starting Nmap 7.95 ( https://nmap.org ) at 2025-05-22 15:06 IST
Nmap scan report for 192.168.1.0
Host is up (0.49s latency).
Nmap scan report for Unit (192.168.1.1)
Host is up (0.0023s latency).
Nmap scan report for 192.168.1.2
Host is up (0.0021s latency).
Nmap scan report for 192.168.1.3
Host is up (0.0021s latency).
Nmap scan report for 192.168.1.4
Host is up (0.0047s latency).
Nmap scan report for 192.168.1.5
Host is up (0.0048s latency).
Nmap scan report for 192.168.1.6
Host is up (0.0048s latency).
Nmap scan report for 192.168.1.7
Host is up (0.0048s latency).
Nmap scan report for 192.168.1.8
Host is up (0.0047s latency).
Nmap scan report for 192.168.1.9
Host is up (0.0047s latency).
Nmap scan report for 192.168.1.10
Host is up (0.0047s latency).
Nmap scan report for 192.168.1.11
Host is up (0.74s latency).
Nmap scan report for 192.168.1.12
Host is up (0.73s latency).
Nmap scan report for 192.168.1.13
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.14
Host is up (0.0025s latency).
Nmap scan report for 192.168.1.15
Host is up (0.0028s latency).
Nmap scan report for 192.168.1.16
Host is up (0.0031s latency).
Nmap scan report for 192.168.1.17
Host is up (0.0026s latency).
Nmap scan report for 192.168.1.18
Host is up (0.0029s latency).
Nmap scan report for 192.168.1.19
Host is up (0.0029s latency).
Nmap scan report for 192.168.1.20
Host is up (0.0032s latency).
Nmap scan report for 192.168.1.21
Host is up (0.0030s latency).
Nmap scan report for 192.168.1.22
Host is up (0.0025s latency).
Nmap scan report for 192.168.1.23
Host is up (0.0017s latency).
Nmap scan report for 192.168.1.24
Host is up (0.0014s latency).
Nmap scan report for 192.168.1.25
Host is up (0.0014s latency).
Nmap scan report for 192.168.1.26
Host is up (0.00042s latency).
Nmap scan report for 192.168.1.27
Host is up (0.00073s latency).
Nmap scan report for 192.168.1.28
Host is up (0.00049s latency).
Nmap scan report for 192.168.1.29
Host is up (0.00035s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.29
Host is up (0.00035s latency).
Nmap scan report for 192.168.1.30
Host is up (0.0064s latency).
Nmap scan report for 192.168.1.31
Host is up (0.0067s latency).
Nmap scan report for 192.168.1.32
Host is up (0.0067s latency).
Nmap scan report for 192.168.1.33
Host is up (0.73s latency).
Nmap scan report for 192.168.1.34
Host is up (0.50s latency).
Nmap scan report for 192.168.1.35
Host is up (0.0067s latency).
Nmap scan report for 192.168.1.36
Host is up (0.00051s latency).
Nmap scan report for 192.168.1.37
Host is up (0.00048s latency).
Nmap scan report for 192.168.1.38
Host is up (0.0069s latency).
Nmap scan report for 192.168.1.39
Host is up (0.0066s latency).
Nmap scan report for 192.168.1.40
Host is up (0.00026s latency).
Nmap scan report for 192.168.1.41
Host is up (0.00039s latency).
Nmap scan report for 192.168.1.42
Host is up (0.00057s latency).
Nmap scan report for 192.168.1.43
Host is up (0.00065s latency).
Nmap scan report for 192.168.1.44
Host is up (0.00064s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.44
Host is up (0.00064s latency).
Nmap scan report for 192.168.1.45
Host is up (0.00072s latency).
Nmap scan report for 192.168.1.46
Host is up (0.00071s latency).
Nmap scan report for 192.168.1.47
Host is up (0.73s latency).
Nmap scan report for 192.168.1.48
Host is up (0.73s latency).
Nmap scan report for 192.168.1.49
Host is up (0.00091s latency).
Nmap scan report for 192.168.1.50
Host is up (0.00030s latency).
Nmap scan report for 192.168.1.51
Host is up (0.00036s latency).
Nmap scan report for 192.168.1.52
Host is up (0.00092s latency).
Nmap scan report for 192.168.1.53
Host is up (0.0011s latency).
Nmap scan report for 192.168.1.54
Host is up (0.0076s latency).
Nmap scan report for 192.168.1.55
Host is up (0.0080s latency).
Nmap scan report for 192.168.1.56
Host is up (0.00095s latency).
Nmap scan report for 192.168.1.57
Host is up (0.73s latency).
Nmap scan report for 192.168.1.58
Host is up (0.73s latency).
Nmap scan report for 192.168.1.59
Host is up (0.00093s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.59
Host is up (0.00093s latency).
Nmap scan report for 192.168.1.60
Host is up (0.0019s latency).
Nmap scan report for 192.168.1.61
Host is up (0.0018s latency).
Nmap scan report for 192.168.1.62
Host is up (0.00097s latency).
Nmap scan report for 192.168.1.63
Host is up (0.00096s latency).
Nmap scan report for 192.168.1.64
Host is up (0.0027s latency).
Nmap scan report for 192.168.1.65
Host is up (0.0027s latency).
Nmap scan report for 192.168.1.66
Host is up (0.00075s latency).
Nmap scan report for 192.168.1.67
Host is up (0.00090s latency).
Nmap scan report for 192.168.1.68
Host is up (0.73s latency).
Nmap scan report for 192.168.1.69
Host is up (0.73s latency).
Nmap scan report for 192.168.1.70
Host is up (0.00069s latency).
Nmap scan report for 192.168.1.71
Host is up (0.00087s latency).
Nmap scan report for 192.168.1.72
Host is up (0.00037s latency).
Nmap scan report for 192.168.1.73
Host is up (0.73s latency).
Nmap scan report for 192.168.1.74
Host is up (0.64s latency).
```

```
E:\ File Actions Edit View Help  
Nmap scan report for 192.168.1.74  
Host is up (0.64s latency).  
Nmap scan report for 192.168.1.75  
Host is up (0.00082s latency).  
Nmap scan report for 192.168.1.76  
Host is up (0.0012s latency).  
Nmap scan report for 192.168.1.77  
Host is up (0.0015s latency).  
Nmap scan report for 192.168.1.78  
Host is up (0.0017s latency).  
Nmap scan report for 192.168.1.79  
Host is up (0.0018s latency).  
Nmap scan report for 192.168.1.80  
Host is up (0.0015s latency).  
Nmap scan report for 192.168.1.81  
Host is up (0.0016s latency).  
Nmap scan report for 192.168.1.82  
Host is up (0.0015s latency).  
Nmap scan report for 192.168.1.83  
Host is up (0.63s latency).  
Nmap scan report for 192.168.1.84  
Host is up (1.1s latency).  
Nmap scan report for 192.168.1.85  
Host is up (0.0015s latency).  
Nmap scan report for 192.168.1.86  
Host is up (0.0015s latency).  
Nmap scan report for 192.168.1.87  
Host is up (0.00029s latency).  
Nmap scan report for 192.168.1.88  
Host is up (0.00023s latency).  
Nmap scan report for 192.168.1.89  
Host is up (0.00023s latency).
```

```
E:\ File Actions Edit View Help  
Nmap scan report for 192.168.1.89  
Host is up (0.00023s latency).  
Nmap scan report for 192.168.1.90  
Host is up (0.00035s latency).  
Nmap scan report for 192.168.1.91  
Host is up (0.0013s latency).  
Nmap scan report for 192.168.1.92  
Host is up (0.63s latency).  
Nmap scan report for 192.168.1.93  
Host is up (0.63s latency).  
Nmap scan report for 192.168.1.94  
Host is up (0.0090s latency).  
Nmap scan report for 192.168.1.95  
Host is up (0.0090s latency).  
Nmap scan report for 192.168.1.96  
Host is up (0.00052s latency).  
Nmap scan report for 192.168.1.97  
Host is up (0.00017s latency).  
Nmap scan report for 192.168.1.98  
Host is up (0.0012s latency).  
Nmap scan report for 192.168.1.99  
Host is up (0.63s latency).  
Nmap scan report for 192.168.1.100  
Host is up (0.63s latency).  
Nmap scan report for 192.168.1.101  
Host is up (0.0012s latency).  
Nmap scan report for 192.168.1.102  
Host is up (0.0087s latency).  
Nmap scan report for 192.168.1.103  
Host is up (0.0085s latency).  
Nmap scan report for 192.168.1.104  
Host is up (0.00059s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.104
Host is up (0.00059s latency).
Nmap scan report for 192.168.1.105
Host is up (0.00081s latency).
Nmap scan report for 192.168.1.106
Host is up (0.00081s latency).
Nmap scan report for 192.168.1.107
Host is up (0.00081s latency).
Nmap scan report for 192.168.1.108
Host is up (0.00066s latency).
Nmap scan report for 192.168.1.109
Host is up (0.63s latency).
Nmap scan report for 192.168.1.110
Host is up (0.63s latency).
Nmap scan report for 192.168.1.111
Host is up (0.00095s latency).
Nmap scan report for 192.168.1.112
Host is up (0.00080s latency).
Nmap scan report for 192.168.1.113
Host is up (0.00080s latency).
Nmap scan report for 192.168.1.114
Host is up (0.00067s latency).
Nmap scan report for 192.168.1.115
Host is up (0.00092s latency).
Nmap scan report for 192.168.1.116
Host is up (0.0077s latency).
Nmap scan report for 192.168.1.117
Host is up (0.0077s latency).
Nmap scan report for 192.168.1.118
Host is up (0.63s latency).
Nmap scan report for 192.168.1.119
Host is up (0.63s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.119
Host is up (0.63s latency).
Nmap scan report for 192.168.1.120
Host is up (0.00086s latency).
Nmap scan report for 192.168.1.121
Host is up (0.0012s latency).
Nmap scan report for 192.168.1.122
Host is up (0.00024s latency).
Nmap scan report for 192.168.1.123
Host is up (0.00033s latency).
Nmap scan report for 192.168.1.124
Host is up (0.00080s latency).
Nmap scan report for 192.168.1.125
Host is up (1.8s latency).
Nmap scan report for 192.168.1.126
Host is up (1.8s latency).
Nmap scan report for 192.168.1.127
Host is up (0.00043s latency).
Nmap scan report for 192.168.1.128
Host is up (1.8s latency).
Nmap scan report for 192.168.1.129
Host is up (0.46s latency).
Nmap scan report for 192.168.1.130
Host is up (0.0015s latency).
Nmap scan report for 192.168.1.131
Host is up (0.00067s latency).
Nmap scan report for 192.168.1.132
Host is up (0.00074s latency).
Nmap scan report for 192.168.1.133
Host is up (0.00078s latency).
Nmap scan report for 192.168.1.134
Host is up (0.00068s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.134
Host is up (0.00068s latency).
Nmap scan report for 192.168.1.135
Host is up (0.0011s latency).
Nmap scan report for 192.168.1.136
Host is up (0.94s latency).
Nmap scan report for 192.168.1.137
Host is up (1.8s latency).
Nmap scan report for 192.168.1.138
Host is up (1.8s latency).
Nmap scan report for 192.168.1.139
Host is up (0.94s latency).
Nmap scan report for 192.168.1.140
Host is up (0.94s latency).
Nmap scan report for 192.168.1.141
Host is up (0.94s latency).
Nmap scan report for 192.168.1.142
Host is up (0.94s latency).
Nmap scan report for 192.168.1.143
Host is up (0.94s latency).
Nmap scan report for 192.168.1.144
Host is up (0.93s latency).
Nmap scan report for 192.168.1.145
Host is up (0.93s latency).
Nmap scan report for 192.168.1.146
Host is up (1.8s latency).
Nmap scan report for 192.168.1.147
Host is up (1.8s latency).
Nmap scan report for 192.168.1.148
Host is up (0.93s latency).
Nmap scan report for 192.168.1.149
Host is up (0.93s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.149
Host is up (0.93s latency).
Nmap scan report for 192.168.1.150
Host is up (0.84s latency).
Nmap scan report for 192.168.1.151
Host is up (0.84s latency).
Nmap scan report for 192.168.1.152
Host is up (0.84s latency).
Nmap scan report for 192.168.1.153
Host is up (1.8s latency).
Nmap scan report for 192.168.1.154
Host is up (1.8s latency).
Nmap scan report for 192.168.1.155
Host is up (0.84s latency).
Nmap scan report for 192.168.1.156
Host is up (0.46s latency).
Nmap scan report for 192.168.1.157
Host is up (1.8s latency).
Nmap scan report for 192.168.1.158
Host is up (0.83s latency).
Nmap scan report for 192.168.1.159
Host is up (0.83s latency).
Nmap scan report for 192.168.1.160
Host is up (0.83s latency).
Nmap scan report for 192.168.1.161
Host is up (0.83s latency).
Nmap scan report for 192.168.1.162
Host is up (0.83s latency).
Nmap scan report for 192.168.1.163
Host is up (0.83s latency).
Nmap scan report for 192.168.1.164
Host is up (0.53s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.164
Host is up (0.53s latency).
Nmap scan report for 192.168.1.165
Host is up (1.8s latency).
Nmap scan report for 192.168.1.166
Host is up (1.8s latency).
Nmap scan report for 192.168.1.167
Host is up (0.53s latency).
Nmap scan report for 192.168.1.168
Host is up (0.53s latency).
Nmap scan report for 192.168.1.169
Host is up (0.53s latency).
Nmap scan report for 192.168.1.170
Host is up (0.52s latency).
Nmap scan report for 192.168.1.171
Host is up (0.52s latency).
Nmap scan report for 192.168.1.172
Host is up (0.52s latency).
Nmap scan report for 192.168.1.173
Host is up (0.52s latency).
Nmap scan report for 192.168.1.174
Host is up (1.8s latency).
Nmap scan report for 192.168.1.175
Host is up (1.8s latency).
Nmap scan report for 192.168.1.176
Host is up (0.52s latency).
Nmap scan report for 192.168.1.177
Host is up (0.52s latency).
Nmap scan report for 192.168.1.178
Host is up (0.43s latency).
Nmap scan report for 192.168.1.179
Host is up (0.43s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.179
Host is up (0.43s latency).
Nmap scan report for 192.168.1.180
Host is up (0.43s latency).
Nmap scan report for 192.168.1.181
Host is up (1.8s latency).
Nmap scan report for 192.168.1.182
Host is up (1.8s latency).
Nmap scan report for 192.168.1.183
Host is up (0.43s latency).
Nmap scan report for 192.168.1.184
Host is up (1.8s latency).
Nmap scan report for 192.168.1.185
Host is up (1.8s latency).
Nmap scan report for 192.168.1.186
Host is up (0.42s latency).
Nmap scan report for 192.168.1.187
Host is up (0.46s latency).
Nmap scan report for 192.168.1.188
Host is up (1.8s latency).
Nmap scan report for 192.168.1.189
Host is up (0.42s latency).
Nmap scan report for 192.168.1.190
Host is up (0.42s latency).
Nmap scan report for 192.168.1.191
Host is up (0.42s latency).
Nmap scan report for 192.168.1.192
Host is up (0.42s latency).
Nmap scan report for 192.168.1.193
Host is up (0.42s latency).
Nmap scan report for 192.168.1.194
Host is up (0.33s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.194
Host is up (0.33s latency).
Nmap scan report for 192.168.1.195
Host is up (1.8s latency).
Nmap scan report for 192.168.1.196
Host is up (0.46s latency).
Nmap scan report for 192.168.1.197
Host is up (0.33s latency).
Nmap scan report for 192.168.1.198
Host is up (0.32s latency).
Nmap scan report for 192.168.1.199
Host is up (0.32s latency).
Nmap scan report for 192.168.1.200
Host is up (0.46s latency).
Nmap scan report for 192.168.1.201
Host is up (0.46s latency).
Nmap scan report for 192.168.1.202
Host is up (0.32s latency).
Nmap scan report for 192.168.1.203
Host is up (0.32s latency).
Nmap scan report for 192.168.1.204
Host is up (0.32s latency).
Nmap scan report for 192.168.1.205
Host is up (0.32s latency).
Nmap scan report for 192.168.1.206
Host is up (0.46s latency).
Nmap scan report for 192.168.1.207
Host is up (0.46s latency).
Nmap scan report for 192.168.1.208
Host is up (0.32s latency).
Nmap scan report for 192.168.1.209
Host is up (0.32s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.209
Host is up (0.32s latency).
Nmap scan report for 192.168.1.210
Host is up (0.23s latency).
Nmap scan report for 192.168.1.211
Host is up (0.23s latency).
Nmap scan report for 192.168.1.212
Host is up (0.22s latency).
Nmap scan report for 192.168.1.213
Host is up (0.46s latency).
Nmap scan report for 192.168.1.214
Host is up (0.46s latency).
Nmap scan report for 192.168.1.215
Host is up (0.22s latency).
Nmap scan report for 192.168.1.216
Host is up (0.22s latency).
Nmap scan report for 192.168.1.217
Host is up (0.46s latency).
Nmap scan report for 192.168.1.218
Host is up (0.46s latency).
Nmap scan report for 192.168.1.219
Host is up (0.22s latency).
Nmap scan report for 192.168.1.220
Host is up (0.22s latency).
Nmap scan report for 192.168.1.221
Host is up (0.22s latency).
Nmap scan report for 192.168.1.222
Host is up (0.22s latency).
Nmap scan report for 192.168.1.223
Host is up (0.22s latency).
Nmap scan report for 192.168.1.224
Host is up (0.12s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.224
Host is up (0.12s latency).
Nmap scan report for 192.168.1.225
Host is up (0.46s latency).
Nmap scan report for 192.168.1.226
Host is up (0.46s latency).
Nmap scan report for 192.168.1.227
Host is up (0.12s latency).
Nmap scan report for 192.168.1.228
Host is up (0.12s latency).
Nmap scan report for 192.168.1.229
Host is up (0.12s latency).
Nmap scan report for 192.168.1.230
Host is up (0.46s latency).
Nmap scan report for 192.168.1.231
Host is up (0.46s latency).
Nmap scan report for 192.168.1.232
Host is up (0.12s latency).
Nmap scan report for 192.168.1.233
Host is up (0.12s latency).
Nmap scan report for 192.168.1.234
Host is up (0.12s latency).
Nmap scan report for 192.168.1.235
Host is up (0.12s latency).
Nmap scan report for 192.168.1.236
Host is up (0.46s latency).
Nmap scan report for 192.168.1.237
Host is up (0.46s latency).
Nmap scan report for 192.168.1.238
Host is up (0.11s latency).
Nmap scan report for 192.168.1.239
Host is up (1.9s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.239
Host is up (1.9s latency).
Nmap scan report for 192.168.1.240
Host is up (1.9s latency).
Nmap scan report for 192.168.1.241
Host is up (1.9s latency).
Nmap scan report for 192.168.1.242
Host is up (1.9s latency).
Nmap scan report for 192.168.1.243
Host is up (0.46s latency).
Nmap scan report for 192.168.1.244
Host is up (0.46s latency).
Nmap scan report for 192.168.1.245
Host is up (1.9s latency).
Nmap scan report for 192.168.1.246
Host is up (1.9s latency).
Nmap scan report for 192.168.1.247
Host is up (0.46s latency).
Nmap scan report for 192.168.1.248
Host is up (0.61s latency).
Nmap scan report for 192.168.1.249
Host is up (1.9s latency).
Nmap scan report for 192.168.1.250
Host is up (1.9s latency).
Nmap scan report for 192.168.1.251
Host is up (1.9s latency).
Nmap scan report for 192.168.1.252
Host is up (1.9s latency).
Nmap scan report for 192.168.1.253
Host is up (1.9s latency).
Nmap scan report for 192.168.1.254
Host is up (1.9s latency).
```

```
File Actions Edit View Help
Nmap scan report for 192.168.1.242
Host is up (1.9s latency).
Nmap scan report for 192.168.1.243
Host is up (0.46s latency).
Nmap scan report for 192.168.1.244
Host is up (0.46s latency).
Nmap scan report for 192.168.1.245
Host is up (1.9s latency).
Nmap scan report for 192.168.1.246
Host is up (1.9s latency).
Nmap scan report for 192.168.1.247
Host is up (0.46s latency).
Nmap scan report for 192.168.1.248
Host is up (0.61s latency).
Nmap scan report for 192.168.1.249
Host is up (1.9s latency).
Nmap scan report for 192.168.1.250
Host is up (1.9s latency).
Nmap scan report for 192.168.1.251
Host is up (1.9s latency).
Nmap scan report for 192.168.1.252
Host is up (1.9s latency).
Nmap scan report for 192.168.1.253
Host is up (1.9s latency).
Nmap scan report for 192.168.1.254
Host is up (1.9s latency).
Nmap scan report for 192.168.1.255
Host is up (0.0014s latency).
Nmap done: 256 IP addresses (256 hosts up) scanned in 15.30 seconds

```

- Aggressive scan: nmap -A 192.168.XX

```
File Actions Edit View Help
( )-[~]
$ nmap -A 192.168.
Starting Nmap 7.95 ( https://nmap.org ) at 2025-05-22 15:13 IST
Nmap scan report for 192.168.
Host is up (0.0013s latency).
Not shown: 993 filtered tcp ports (no-response)
PORT      STATE SERVICE      VERSION
135/tcp    open  msrpc        Microsoft Windows RPC
139/tcp    open  netbios-ssn   Microsoft Windows netbios-ssn
445/tcp    open  microsoft-ds?
5357/tcp   open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-server-header: Microsoft-HTTPAPI/2.0
|_http-title: Service Unavailable
7070/tcp   open
|_ssl-date: TLS randomness does not represent time
|_ssl-cert: /etc/letsencrypt/live/anyDesk.Client/fullchain.pem
|_Not valid before: 2024-12-01T03:58:09
|_Not valid after:  2074-11-19T03:58:09
8990/tcp   open  tcpwrapped
16992/tcp  open  http         Intel(R) Active Management Technology User Notification Service httpd
|_http-server-header: Intel(R) Active Management Technology
|_http-title: Intel®reg; Active Management Technology
|_Requested resource was /logon.htm
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: bridge/VoIP adapter/general purpose
Running (JUST GUESSING): Oracle Virtualbox (97%), Slirp (97%), AT&T embedded (95%), QEMU (93%)
OS CPE: cpe:/a:danny_gasparovski:slirp cpe:/a:qemu:qemu
Aggressive OS guesses: Oracle Virtualbox Slirp NAT bridge (97%), AT&T BGW210 voice gateway (95%), QEMU user mode network gateway (93%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 1 hop
Service info: OS: Windows; CPE: cpe:/o:microsoft:windows, cpe:/h:intel:active_management_technology:11.0.60.3561

Host script results:
| smb2-time:
|   date: 2025-05-22T09:43:29
|   start_date: N/A
|_ smb2-time mode:
|   3:1:1:
```

```
File Actions Edit View Help
|_http-server-header: Microsoft-HTTPAPI/2.0
|_http-title: Service Unavailable
7070/tcp open ssl/realserver?
|_ssl-date: TLS randomness does not represent time
|_ssl-cert: Subject: commonName=AnyDesk Client
|_Not valid before: 2024-12-01T03:58:09
|_Not valid after: 2074-11-19T03:58:09
8090/tcp open tcpwrapped
16992/tcp open http Intel Active Management Technology User Notification Service httpd [REDACTED]
|_http-server-header: Intel(R) Active Management Technology [REDACTED]
|_http-title: IntelReg; Active Management Technology
|_Requested resource was /logon.htm
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type:
Running (JUST GUESSING): Oracle Virtualbox (97%), Slirp (97%), AT&T embedded (95%), QEMU (93%)
OS CPE: cpe:/a:danny_gasparovski:slirp cpe:/a:qemu:qemu
Aggressive OS guesses: Oracle Virtualbox Slirp NAT bridge (97%), AT&T BGW210 voice gateway (95%), QEMU user mode network gateway (93%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 1 hop
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows_10_creativeright:cpe:/h:intel:active_management_technology-[REDACTED]

Host script results:
| smb2-time:
|   date: 2025-05-22T09:43:29
|   _start_date: N/A
| smb2-security-mode:
|   _Message signing enabled but not required

TRACEROUTE (using port 80/tcp)
HOP RTT      ADDRESS
1  1.06 ms  [REDACTED]

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/. 
Nmap done: 1 IP address (1 host up) scanned in 29.23 seconds
```

## Results Observed:

- The ping scan showed active devices on my network.
- The service scan identified services like Microsoft Windows RPC, HTTP server, and others.
- The aggressive scan gave deeper insights into the OS and network services running.

## My Understanding:

I learned that Nmap is a tool that helps us "look into" a network or computer system to find out:- Which devices are online- What ports are open- What services or software are running. It's like being able to "see inside" a computer without touching it, useful for ethical hacking, cybersecurity checks, and network management.

## Conclusion:

This mini project gave me hands-on experience in ethical network scanning. I now understand how to scan my own system and network safely to discover vulnerabilities or learn more about services running.