Assignment - 2 Nmap

Target Specification

- 1. nmap 192.168.43.211
 - Scan a single IP

```
Starting Nmap 7.93 (https://nmap.org ) at 2023-02-03 15:32 IST
Nmap scan report for 192.168.43.211
Host is up (0.012s latency).
All 1000 scanned ports on 192.168.43.211 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)

Nmap done: 1 IP address (1 host up) scanned in 0.86 seconds
```

2. nmap 192.168.43.211 192.168.43.17

- Scan specific lps

```
$ nmap 192.168.43.211 192.168.43.17
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:34 IST
Nmap scan report for 192.168.43.211
Host is up (0.015s latency).
All 1000 scanned ports on 192.168.43.211 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)

Nmap scan report for 192.168.43.17
Host is up (0.013s latency).
All 1000 scanned ports on 192.168.43.17 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)

Nmap done: 2 IP addresses (2 hosts up) scanned in 1.61 seconds
```

3. nmap 192.168.43.211 192.168.43.1-254

- Scan a range

```
nmap 192.168.43.211 192.168.43.1-254
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:37 IST
Nmap scan report for 192.168.43.211
Host is up (0.020s latency).
All 1000 scanned ports on 192.168.43.211 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.17
Host is up (0.019s latency).
All 1000 scanned ports on 192.168.43.17 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.62
Host is up (0.00047s latency).
All 1000 scanned ports on 192.168.43.62 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.103
Host is up (0.013s latency).
Not shown: 999 closed tcp ports (conn-refused)
PORT STATE SERVICE
53/tcp open domain
Nmap scan report for 192.168.43.211
Host is up (0.019s latency).
All 1000 scanned ports on 192.168.43.211 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap done: 255 IP addresses (5 hosts up) scanned in 4.36 seconds
```

4. nmap google.com

Scan a domain

```
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:38 IST
Nmap scan report for google.com (142.251.42.78)
Host is up (0.053s latency).
Other addresses for google.com (not scanned): 2404:6800:4009:80c::200e
rDNS record for 142.251.42.78: bom12s21-in-f14.1e100.net
Not shown: 998 filtered tcp ports (no-response)
PORT STATE SERVICE
80/tcp open http
443/tcp open https

Nmap done: 1 IP address (1 host up) scanned in 6.54 seconds
```

5. nmap 192.168.43.211/24

- Scan using CIDR notation

```
$ nmap 192.168.43.211/24
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:40 IST
Nmap scan report for 192.168.43.3
Host is up (0.016s latency).
All 1000 scanned ports on 192.168.43.3 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.17
Host is up (0.017s latency).
All 1000 scanned ports on 192.168.43.17 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.62
Host is up (0.00049s latency).
All 1000 scanned ports on 192.168.43.62 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.103
Host is up (0.018s latency).
Not shown: 999 closed tcp ports (conn-refused)
PORT STATE SERVICE
53/tcp open domain
Nmap done: 256 IP addresses (4 hosts up) scanned in 5.68 seconds
```

6. nmap -iL targets.txt

- Scan targets from a file

```
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:43 IST Nmap scan report for 192.168.43.211 Host is up (0.012s latency).
All 1000 scanned ports on 192.168.43.211 are in ignored states. Not shown: 1000 closed tcp ports (conn-refused)

Nmap scan report for 192.168.43.17 Host is up (0.011s latency).
All 1000 scanned ports on 192.168.43.17 are in ignored states. Not shown: 1000 closed tcp ports (conn-refused)

Nmap done: 2 IP addresses (2 hosts up) scanned in 0.61 seconds
```

7. nmap -iR 100

Scan 100 random hosts

```
└─$ nmap -iR 100
Starting Nmap 7.93 (https://nmap.org) at 2023-02-03 15:45 IST
Nmap scan report for dennis.mprnetwork.com (77.37.71.103)
Host is up (0.22s latency).
Not shown: 996 filtered tcp ports (no-response)
       STATE SERVICE
PORT
53/tcp closed domain
80/tcp open http
443/tcp open https
3128/tcp open squid-http
Nmap scan report for 160.89.222.92
Host is up (0.81s latency).
Not shown: 996 closed tcp ports (conn-refused)
       STATE
                SERVICE
25/tcp | filtered | smtp
135/tcp filtered msrpc
139/tcp filtered netbios-ssn
445/tcp filtered microsoft-ds
Nmap scan report for 129.247.6.189
Host is up (0.19s latency).
Not shown: 996 filtered tcp ports (no-response)
PORT
       STATE SERVICE
443/tcp open https
2000/tcp open cisco-sccp
5060/tcp open sip
8010/tcp open xmpp
Nmap scan report for 116.56.9.214
Host is up (0.21s latency).
Not shown: 987 closed tcp ports (conn-refused)
PORT
         STATE
                  SERVICE
25/tcp
         filtered smtp
135/tcp filtered msrpc
139/tcp filtered netbios-ssn
445/tcp filtered microsoft-ds
593/tcp unfiltered http-rpc-epmap
1010/tcp filtered surf
1025/tcp filtered NFS-or-IIS
2100/tcp filtered amiganetfs
2105/tcp filtered eklogin
3325/tcp filtered active-net
4444/tcp filtered krb524
6129/tcp filtered unknown
16012/tcp filtered unknown
Nmap done: 100 IP addresses (4 hosts up) scanned in 805.31 seconds
```

8. nmap 192.168.43.1-254 -exclude 192.168.43.17

- Exclude listed hosts

```
s nmap 192.168.43.1-254 -exclude 192.168.43.17
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:46 IST
Nmap scan report for 192.168.43.3
Host is up (0.021s latency).
All 1000 scanned ports on 192.168.43.3 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.62
Host is up (0.0055s latency).
All 1000 scanned ports on 192.168.43.62 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap scan report for 192.168.43.103
Host is up (0.0082s latency).
Not shown: 999 closed tcp ports (conn-refused)
PORT STATE SERVICE
53/tcp open domain
Nmap scan report for 192.168.43.211
Host is up (0.023s latency).
All 1000 scanned ports on 192.168.43.211 are in ignored states.
Not shown: 1000 closed tcp ports (conn-refused)
Nmap done: 253 IP addresses (4 hosts up) scanned in 3.04 seconds
```

Scan Techniques

1. nmap 192.21.1.51 -sS

- TCP SYN port scan (Default)

```
Starting Nmap 7.93 (https://nmap.org ) at 2023-03-17 14:58 IST
Nmap scan report for 172.21.1.51
Host is up (0.0070s latency).
Not shown: 998 closed tcp ports (reset)
PORT STATE SERVICE
21/tcp filtered ftp
111/tcp open rpcbind

Nmap done: 1 IP address (1 host up) scanned in 1.39 seconds
```

2. nmap 192.21.1.51 -sT

- TCP connect port scan (Default without root privilege)

```
" nmap 172.21.1.51 -sT
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-17 15:00 IST
Nmap scan report for 172.21.1.51
Host is up (0.0076s latency).
Not shown: 998 closed tcp ports (conn-refused)
PORT STATE SERVICE
21/tcp filtered ftp
111/tcp open rpcbind
Nmap done: 1 IP address (1 host up) scanned in 1.31 seconds
```

3. nmap 192.21.1.51 -sU

- UDP port scan

```
nmap 172.21.1.51 -sU
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-17 15:01 IST
Stats: 0:00:23 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 3.64% done; ETC: 15:11 (0:10:09 remaining)
Stats: 0:00:28 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 4.16% done; ETC: 15:13 (0:11:08 remaining)
Stats: 0:03:30 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 22.18% done; ETC: 15:17 (0:12:17 remaining)
Stats: 0:06:22 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 39.38% done; ETC: 15:17 (0:09:48 remaining)
Stats: 0:10:05 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 60.58% done; ETC: 15:18 (0:06:34 remaining)
Stats: 0:12:40 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 75.71% done; ETC: 15:18 (0:04:04 remaining)
Stats: 0:16:05 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 95.21% done; ETC: 15:18 (0:00:49 remaining)
Stats: 0:16:06 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 95.31% done; ETC: 15:18 (0:00:48 remaining)
Nmap scan report for 172.21.1.51
Host is up (0.0042s latency).
Not shown: 996 closed udp ports (port-unreach)
PORT
                       SERVICE
         STATE
111/udp open
                       rpcbind
623/udp open
                       asf-rmcp
631/udp open|filtered ipp
5353/udp open|filtered zeroconf
Nmap done: 1 IP address (1 host up) scanned in 1023.03 seconds
```

4. nmap 192.21.1.51 -sA

- TCP ACK port scan

```
(root@kali)-[~]
# nmap 172.21.1.51 -sA
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-17 15:03 IST
Nmap scan report for 172.21.1.51
Host is up (0.0039s latency).
All 1000 scanned ports on 172.21.1.51 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
Nmap done: 1 IP address (1 host up) scanned in 21.20 seconds
```

5. nmap 192.21.1.51 -sW

- TCP Window port scan

```
(root@kali)-[~]
# nmap 172.21.1.51 -sW
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-17 15:04 IST
Nmap scan report for 172.21.1.51
Host is up (0.017s latency).
All 1000 scanned ports on 172.21.1.51 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 21.23 seconds
```

6. nmap 192.21.1.51 -sM

- TCP Maimon port scan

```
(root@kali)-[~]
# nmap 172.21.1.51 -sM
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-17 15:05 IST
Nmap scan report for 172.21.1.51
Host is up (0.0044s latency).
All 1000 scanned ports on 172.21.1.51 are in ignored states.
Not shown: 1000 open|filtered tcp ports (no-response)
Nmap done: 1 IP address (1 host up) scanned in 21.21 seconds
```

Host Discovery

1. nmap 192.168.43.100-105 -sL

No Scan. List targets only

```
(reot@ kali)-[~]
    nmap 192.168.43.100-105 -sL
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 16:04 IST
Nmap scan report for 192.168.43.100
Nmap scan report for 192.168.43.101
Nmap scan report for 192.168.43.102
Nmap scan report for 192.168.43.103
Nmap scan report for 192.168.43.104
Nmap scan report for 192.168.43.105
Nmap done: 6 IP addresses (0 hosts up) scanned in 0.06 seconds
```

2. nmap 192.168.43.103/24 -sn

Disable port scanning

```
nmap 192.168.43.103/24
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 16:03 IST setup_target: failed to determine route to 192.168.43.0
setup_target: failed to determine route to 192.168.43.1
setup_target: failed to determine route to 192.168.43.2
setup_target: failed to determine route to 192.168.43.3 setup_target: failed to determine route to 192.168.43.4 setup_target: failed to determine route to 192.168.43.5 setup_target: failed to determine route to 192.168.43.6
setup_target: failed to determine route to 192.168.43.7
setup_target: failed to determine route to 192.168.43.8
setup_target: failed to determine route to 192.168.43.9
setup_target: failed to determine route to 192.168.43.10
setup_target: failed to determine route to 192.168.43.11
setup_target: failed to determine route to 192.168.43.12
setup_target: failed to determine route to 192.168.43.13
setup_target: failed to determine route to 192.168.43.14
setup_target: failed to determine route to 192.168.43.15
setup_target: failed to determine route to 192.168.43.16
setup_target: failed to determine route to 192.168.43.17
setup_target: failed to determine route to 192.168.43.18
setup_target: failed to determine route to 192.168.43.19
setup_target: failed to determine route to 192.168.43.20
setup_target: failed to determine route to 192.168.43.21
setup_target: failed to determine route to 192.168.43.22
setup_target: failed to determine route to 192.168.43.23
setup_target: failed to determine route to 192.168.43.24
setup_target: failed to determine route to 192.168.43.25
setup_target: failed to determine route to 192.168.43.26
setup_target: failed to determine route to 192.168.43.27
setup_target: failed to determine route to 192.168.43.28
setup_target: failed to determine route to 192.168.43.29
setup_target: failed to determine route to 192.168.43.30
setup_target: failed to determine route to 192.168.43.31 setup_target: failed to determine route to 192.168.43.32
setup_target: failed to determine route to 192.168.43.33
setup_target: failed to determine route to 192.168.43.34
setup_target: failed to determine route to 192.168.43.35
setup_target: failed to determine route to 192.168.43.36
setup_target: failed to determine route to 192.168.43.37
 setup target: failed to determine route to 192.168.43
```

3. nmap 192.168.43.100-105 -Pn

Disable host discovery. Port scan only

```
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```

4. nmap 192.168.43.100-105 -PS22-25,80

- TCP SYN discovery on port x. Port 80 by default

```
map 192.168.43.100-105 -PS22-25,80
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 16:01 IST
Nmap scan report for 192.168.43.103
Host is up (0.012s latency).
Not shown: 999 closed tcp ports (reset)
PORT STATE SERVICE
53/tcp open domain
MAC Address: 52:15:C8:09:F6:ED (Unknown)
Nmap done: 6 IP addresses (1 host up) scanned in 1.53 seconds
```

5. nmap 192.168.43.100-105 -PA22-25,80

- TCP ACK discovery on port x. Port 80 by default

```
(root@kali)-[~]
    nmap 192.168.43.100-105 -PA22-25,80
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 16:00 IST
Nmap scan report for 192.168.43.103
Host is up (0.0063s latency).
Not shown: 999 closed tcp ports (reset)
PORT STATE SERVICE
53/tcp open domain
MAC Address: 52:15:C8:09:F6:ED (Unknown)
Nmap done: 6 IP addresses (1 host up) scanned in 1.55 seconds
```

6. nmap 192.168.43.100-105 -PU53

- UDP discovery on port x. Port 40125 by default

7. nmap 192.168.43.103/24 -PR

- ARP discovery on local network

```
nmap 192.168.43.103/24 -PR
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 16:06 IST
Nmap scan report for 192.168.43.2
Host is up (0.052s latency).
All 1000 scanned ports on 192.168.43.2 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 9C:30:5B:F2:04:E5 (Hon Hai Precision Ind.)
Nmap scan report for 192.168.43.103
Host is up (0.0071s latency).
Not shown: 999 closed tcp ports (reset)
PORT STATE SERVICE
53/tcp open domain
MAC Address: 52:15:C8:09:F6:ED (Unknown)
Nmap scan report for 192.168.43.110
Host is up (0.00036s latency).
Not shown: 999 filtered tcp ports (no-response)
PORT
        STATE SERVICE
5357/tcp open wsdapi
MAC Address: D4:25:8B:D7:AD:66 (Intel Corporate)
Nmap scan report for 192.168.43.211
Host is up (0.011s latency).
All 1000 scanned ports on 192.168.43.211 are in ignored states.
Not shown: 1000 closed tcp ports (reset)
MAC Address: 9C:30:5B:F2:04:E5 (Hon Hai Precision Ind.)
Nmap scan report for 192.168.43.228
Host is up (0.020s latency).
All 1000 scanned ports on 192.168.43.228 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 48:A4:72:EE:26:72 (Intel Corporate)
Nmap scan report for 192.168.43.62
Host is up (0.0000050s latency).
All 1000 scanned ports on 192.168.43.62 are in ignored states.
Not shown: 1000 closed tcp ports (reset)
Nmap done: 256 IP addresses (6 hosts up) scanned in 15.55 seconds
```

8. nmap 192.168.43.103 -n

- Never do DNS resolution

Port Specification:

1. nmap 192.168.43.62 -p 21

Port scan for port 21

```
Starting Nmap 7.93 (https://nmap.org ) at 2023-02-03 15:35 IST Nmap scan report for 192.168.43.62 Host is up (0.0078s latency).

PORT STATE SERVICE 21/tcp closed ftp

Nmap done: 1 IP address (1 host up) scanned in 0.13 seconds
```

2. nmap 192.168.43.62 -p 80-100

Port range scan

```
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:36 IST Nmap scan report for 192.168.43.62
Host is up (0.010s latency).

PORT STATE SERVICE
80/tcp closed http
81/tcp closed hosts2-ns
82/tcp closed xfer
83/tcp closed mit-ml-dev
84/tcp closed mit-ml-dev
86/tcp closed mfcobol
87/tcp closed mfcobol
87/tcp closed su-mit-tg
90/tcp closed dnsix
91/tcp closed dnp
93/tcp closed dp
94/tcp closed dp
94/tcp closed dp
95/tcp closed dp
95/tcp closed dixie
97/tcp closed supdup
96/tcp closed supdup
96/tcp closed swift-rvf
98/tcp closed metagram
100/tcp closed newacct
Nmap done: 1 IP address (1 host up) scanned in 0.08 seconds
```

3. nmap 192.168.43.62 -p U:45,T:80-100,25

Port scan multiple TCP and UDP ports

```
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:44 IST
WARNING: Your ports include "U:" but you haven't specified UDP scan wit
h -sU.
Nmap scan report for 192.168.43.62
Host is up (0.0083s latency).
PORT
       STATE SERVICE
23/tcp closed telnet
80/tcp closed http
81/tcp closed hosts2-ns
82/tcp closed xfer
83/tcp closed mit-ml-dev
84/tcp closed ctf
85/tcp closed mit-ml-dev
86/tcp closed mfcobol
87/tcp closed priv-term-l
88/tcp closed kerberos-sec
89/tcp closed su-mit-tg
90/tcp closed dnsix
91/tcp closed mit-dov
92/tcp closed npp
93/tcp closed dcp
94/tcp closed objcall
95/tcp closed supdup
96/tcp closed dixie
97/tcp closed swift-rvf
98/tcp closed linuxconf
99/tcp closed metagram
100/tcp closed newacct
```

4. nmap 192.168.43.62 -p-

Port scan all ports

```
Starting Nmap 7.93 (https://nmap.org ) at 2023-02-03 15:49 IST Nmap scan report for 192.168.43.103 Host is up (0.011s latency). Not shown: 65534 closed tcp ports (conn-refused) PORT STATE SERVICE 53/tcp open domain

Nmap done: 1 IP address (1 host up) scanned in 7.04 seconds
```

5. nmap 192.168.43.62 -p http,https

- Port scan from service name

```
Starting Nmap 7.93 (https://nmap.org ) at 2023-02-03 15:45 IST Nmap scan report for 192.168.43.62 Host is up (0.0064s latency).

PORT STATE SERVICE 80/tcp closed http 443/tcp closed https 8008/tcp closed http

Nmap done: 1 IP address (1 host up) scanned in 0.06 seconds
```

6. nmap 192.168.43.62 -F

Fast port scan (100 ports)

```
Starting Nmap 7.93 (https://nmap.org ) at 2023-02-03 15:46 IST Nmap scan report for 192.168.43.62 Host is up (0.0099s latency).
All 100 scanned ports on 192.168.43.62 are in ignored states. Not shown: 100 closed tcp ports (conn-refused)

Nmap done: 1 IP address (1 host up) scanned in 0.10 seconds
```

7. nmap 192.168.1.1 --top-ports 2000

- Port scan the top 2000 ports

```
$ nmap 192.168.43.103 --top-port 2000
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:50 IST
Nmap scan report for 192.168.43.103
Host is up (0.016s latency).
Not shown: 1999 closed tcp ports (conn-refused)
PORT STATE SERVICE
53/tcp open domain
Nmap done: 1 IP address (1 host up) scanned in 0.41 seconds
```

8. nmap 192.168.43.103 -p-65535

- Leaving off initial port in range makes the scan start at port 1

```
$ nmap 192.168.43.103 -p-65535
Starting Nmap 7.93 ( https://nmap.org ) at 2023-02-03 15:51 IST
Nmap scan report for 192.168.43.103
Host is up (0.021s latency).
Not shown: 65534 closed tcp ports (conn-refused)
PORT STATE SERVICE
53/tcp open domain
Nmap done: 1 IP address (1 host up) scanned in 5.09 seconds
```

9. nmap 192.168.43.103 -p0-

- Leaving off end port in range makes the scan go through to port 65535

```
Starting Nmap 7.93 (https://nmap.org ) at 2023-02-03 15:49 IST Nmap scan report for 192.168.43.103 Host is up (0.0053s latency).
Not shown: 65535 closed tcp ports (conn-refused)
PORT STATE SERVICE
53/tcp open domain

Nmap done: 1 IP address (1 host up) scanned in 5.13 seconds
```