Ci hanno chiesto di scansionare Metasploitable per cercare informazioni, abbiamo utilizzato il programma nmap da kali e utilizzando specifici comandi abbiamo trovato le informazioni richieste.

```
-[/home/kali]
    nmap -0 192.168.1.71
Starting Nmap 7.94 ( https://nmap.org ) at 2024-01-10 07:40 EST
Nmap scan report for 192.168.1.71
Host is up (0.0036s latency).
Not shown: 977 closed tcp ports (reset)
PORT STATE SERVICE
21/tcp open ftp
22/tcp open ssh
23/tcp open telnet
25/tcp open smtp
53/tcp open domain
80/tcp open http
111/tcp open rpcbind
139/tcp open netbios-ssn
445/tcp open microsoft-ds
512/tcp open exec
513/tcp open login
514/tcp open shell
1099/tcp open rmiregistry
1524/tcp open ingreslock
2049/tcp open nfs
2121/tcp open ccproxy-ftp
3306/tcp open mysql
5432/tcp open postgresql
5900/tcp open vnc
6000/tcp open X11
6667/tcp open irc
8009/tcp open ajp13
8180/tcp open unknown
MAC Address: 08:00:27:E9:1F:D7 (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.9 - 2.6.33
Network Distance: 1 hop
OS detection performed. Please report any incorrect results at https://nmap.org/subm
it/ .
Nmap done: 1 IP address (1 host up) scanned in 1.58 seconds
```

OS fingerprint

```
kali)-[/home/kali]
 ____nmap -sT 192.168.1.71
Starting Nmap 7.94 ( https://nmap.org ) at 2024-01-10 07:41 EST
Nmap scan report for 192.168.1.71
Host is up (0.015s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT
        STATE SERVICE
21/tcp open ftp
22/tcp open ssh
23/tcp open telnet
25/tcp open smtp
53/tcp open domain
80/tcp open http
111/tcp open rpcbind
139/tcp open netbios-ssn
445/tcp open microsoft-ds
512/tcp open exec
513/tcp open login
514/tcp open shell
1099/tcp open rmiregistry
1524/tcp open ingreslock
2049/tcp open nfs
2121/tcp open ccproxy-ftp
3306/tcp open mysql
5432/tcp open postgresql
5900/tcp open vnc
6000/tcp open X11
6667/tcp open irc
8009/tcp open ajp13
8180/tcp open unknown
MAC Address: 08:00:27:E9:1F:D7 (Oracle VirtualBox virtual NIC)
Nmap done: 1 IP address (1 host up) scanned in 0.34 seconds
```

TCP connect che fa tutte le scansioni ovvero ping e le 3 strette di mano

```
% kali)-[/home/kali]
 __ nmap -sS 192.168.1.71
Starting Nmap 7.94 ( https://nmap.org ) at 2024-01-10 07:42 EST
Nmap scan report for 192.168.1.71
Host is up (0.00074s latency).
Not shown: 977 closed tcp ports (reset)
PORT
        STATE SERVICE
21/tcp open ftp
22/tcp open ssh
23/tcp open telnet
25/tcp open smtp
53/tcp open domain
80/tcp open http
111/tcp open rpcbind
139/tcp open netbios-ssn
445/tcp open microsoft-ds
512/tcp open exec
513/tcp open login
514/tcp open shell
1099/tcp open rmiregistry
1524/tcp open ingreslock
2049/tcp open nfs
2121/tcp open ccproxy-ftp
3306/tcp open mysql
5432/tcp open postgresql
5900/tcp open vnc
6000/tcp open X11
6667/tcp open irc
8009/tcp open ajp13
8180/tcp open unknown
MAC Address: 08:00:27:E9:1F:D7 (Oracle VirtualBox virtual NIC)
Nmap done: 1 IP address (1 host up) scanned in 0.22 seconds
```

Syn Scan che effettua il ping e la prima stretta e 3 vie

```
li)-[/home/kali]
 map -sV 192.168.1.71
Starting Nmap 7.94 ( https://nmap.org ) at 2024-01-10 07:42 EST
Nmap scan report for 192.168.1.71
Host is up (0.0031s latency).
Not shown: 977 closed tcp ports (reset)
PORT
         STATE SERVICE VERSION
         open ftp
open ssh
open telnet
21/tcp
                              vsftpd 2.3.4
                              OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
22/tcp
                             Linux telnetd
23/tcp
        open smtp
25/tcp
                             Postfix smtpd
53/tcp open domain
                             ISC BIND 9.4.2
80/tcp open http Apache httpd 2.2.8 ((Ubuntu) DAV/2) 111/tcp open rpcbind 2 (RPC #100000)
139/tcp open netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp open netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp open exec netkit-rsh rexecd
513/tcp open login
514/tcp open tcpwrapped
1099/tcp open java-rmi GNU Classpath grmiregistry
1524/tcp open bindshell Metasploitable root shell
2049/tcp open nfs 2-4 (RPC #100003)
2121/tcp open ftp
                             ProFTPD 1.3.1
3306/tcp open mysql
                              MySQL 5.0.51a-3ubuntu5
5432/tcp open postgresql PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp open vnc VNC (protocol 3.3)
6000/tcp open X11
                              (access denied)
6667/tcp open irc
                             UnrealIRCd
8009/tcp open ajp13 Apache Jserv (Protocol v1.3)
8180/tcp open http Apache Tomcat/Coyote JSP engine 1.1
MAC Address: 08:00:27:E9:1F:D7 (Oracle VirtualBox virtual NIC)
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix,
Linux; CPE: cpe:/o:linux:linux_kernel
Service detection performed. Please report any incorrect results at https://nmap.org/
submit/ .
Nmap done: 1 IP address (1 host up) scanned in 11.79 seconds
```

Version detection che ci permette di vedere anche le versioni delle porte

```
)-[/home/kali]
   nmap -0 192.168.1.76
Starting Nmap 7.94 ( https://nmap.org ) at 2024-01-10 07:53 EST
Nmap scan report for 192.168.1.76
Host is up (0.0023s latency).
All 1000 scanned ports on 192.168.1.76 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)
MAC Address: 08:00:27:AA:BE:60 (Oracle VirtualBox virtual NIC)
Warning: OSScan results may be unreliable because we could not find at least 1 open a
nd 1 closed port
Device type: specialized|VoIP phone|general purpose|phone
Running: Allen-Bradley embedded, Atcom embedded, Microsoft Windows 7 8 Phone | XP | 2012,
Palmmicro embedded, VMware Player
OS CPE: cpe:/h:allen-bradley:micrologix_1100 cpe:/h:atcom:at-320 cpe:/o:microsoft:win
dows_7 cpe:/o:microsoft:windows_8 cpe:/o:microsoft:windows cpe:/o:microsoft:windows_x
p::sp3 cpe:/o:microsoft:windows_server_2012 cpe:/a:vmware:player
OS details: Allen Bradley MicroLogix 1100 PLC, Atcom AT-320 VoIP phone, Microsoft Win
dows Embedded Standard 7, Microsoft Windows 8.1 Update 1, Microsoft Windows Phone 7.5
or 8.0, Microsoft Windows XP SP3 or Windows 7 or Windows Server 2012, Palmmicro AR16
88 VoIP module, VMware Player virtual NAT device
Network Distance: 1 hop
OS detection performed. Please report any incorrect results at https://nmap.org/submi
Nmap done: 1 IP address (1 host up) scanned in 26.90 seconds
```

Infine troviamo OS verso win7 (per farlo bisogna semplicemente levare il firewall su win7)