HOMEWORK 31/05/2023

1) OS FINGERPRINT METASPLOITABLE CON sudo nmap -O 192.168.50.101

```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -O 192.168.50.101
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-31 07:37 EDT
Nmap scan report for 192.168.50.101
Host is up (0.014s 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: 08:00:27:66:40:1E (Oracle VirtualBox virtual NIC)
Aggressive OS guesses: Linux 2.6.9 - 2.6.24 (97%), Linux 2.6.9 - 2.6.30 (97%), Linux 2.6.9 - 2.6.33 (97%), Linux 2.6.13 - 2.6.32 (97%), Linux 2.6.9 (97%), Linux 2.6
(96%), Linux 2.6.18 (Debian 4, VMware) (96%), Linksys RV042 router (96%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 1 hop

OS detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 19.13 seconds
```

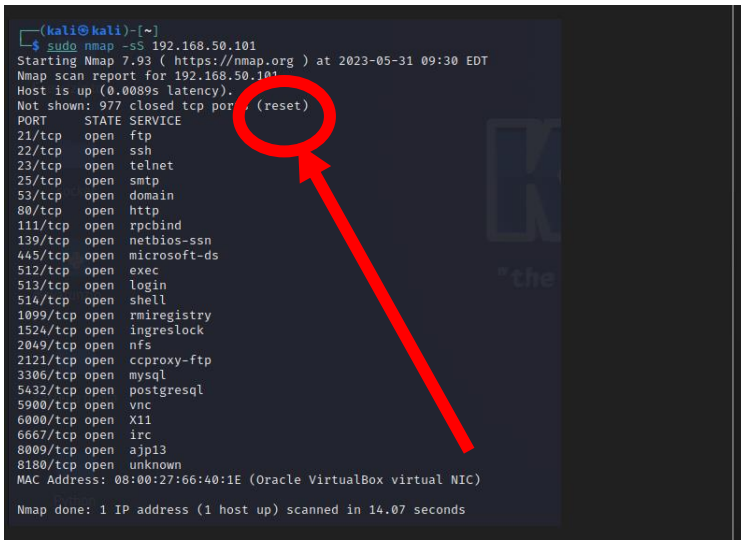
2) SYN Scan Metasploitable con sudo nmap -sS 192.168.50.101

```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sS 192.168.50.101
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-31 09:30 EDT
Nmap scan report for 192.168.50.101
Host is up (0.0089s 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: 08:00:27:66:40:1E (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 14.07 seconds
```

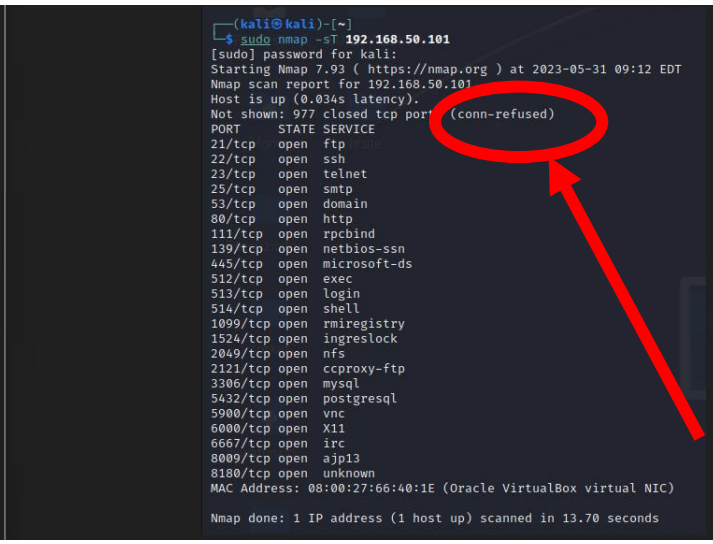
3) TCP Connect con sudo nmap -sT 192.168.50.101

```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sT 192.168.50.101 -oN report.txt
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-31 09:16 EDT
Nmap scan report for 192.168.50.101
Host is up (0.010s 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: 08:00:27:66:40:1E (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 13.65 seconds
```

4) Differenza SYN Scan e TCP Connect. Il SYN SCAN non completa il 3-WH, ergo non completa la scansione TCP, motivo per cui vi è il reset.



```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sS 192.168.50.101
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-31 09:30 EDT
Nmap scan report for 192.168.50.101
Host is up (0.0089s 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: 08:00:27:66:40:1E (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 14.07 seconds
```

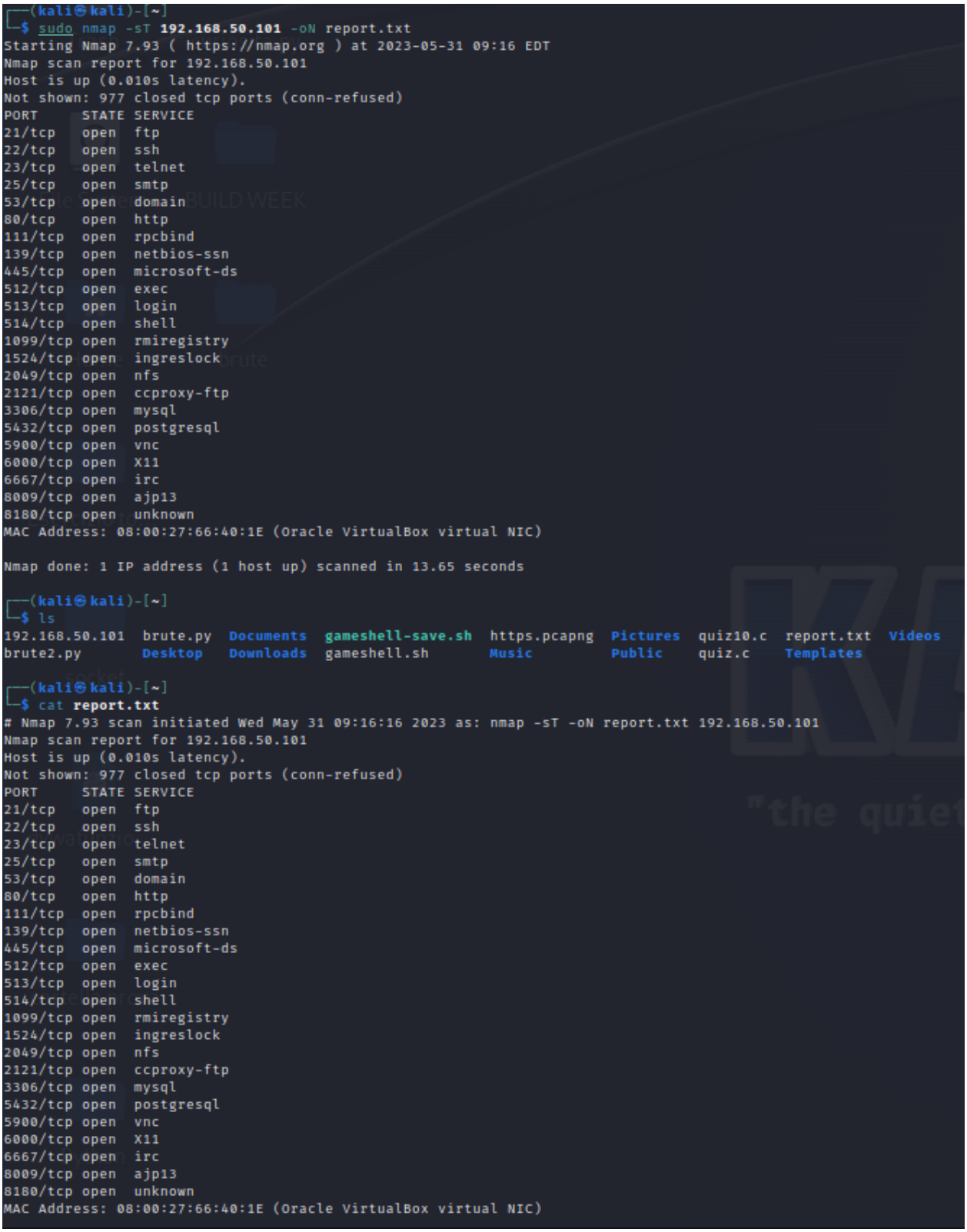


```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sT 192.168.50.101
[sudo] password for kali:
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-31 09:12 EDT
Nmap scan report for 192.168.50.101
Host is up (0.034s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT     STATE SERVICE
21/tcp   open  ftp
22/tcp   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: 08:00:27:66:40:1E (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 13.70 seconds
```

5) Version detection con sudo nmap -sV 192.168.50.101

```
┌──(kali㉿kali)-[~]
└─$ sudo nmap -sV 192.168.50.101
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-31 08:54 EDT
Nmap scan report for 192.168.50.101
Host is up (0.024s latency).
Not shown: 977 closed tcp ports (reset)
PORT     STATE SERVICE     VERSION
21/tcp   open  ftp         vsftpd 2.3.4
22/tcp   open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp   open  telnet?
25/tcp   open  smtp?
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?
513/tcp  open  login?
514/tcp  open  shell?
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  ccproxy-ftp?
3306/tcp open  mysql?
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: 08:00:27:66:40:1E (Oracle VirtualBox virtual NIC)
Service Info: Host: 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 196.21 seconds
```

6) Creazione report con commando sudo nmap -sT 192.168.50.101 -oN report.txt. In seguito ho usato il comando ls per aver conferma della creazione del file in .txt. Infine con comando cat report.txt ho aperto il report.



7) OS FINGERPRINT Windows 7 con sudo nmap -O 192.168.50.102. Avendo già disattivato il firewall su Windows 7 è stato possibile la scansione.