28-AUGUST

LETSUPGRADE ASSESSMENT-DAY4

NAME:USMAN SHARIFF
REG.EMAIL:USMANSHARIFF510@GMAIL.COM

Prepared by: Katie Williams,
Social Media Analyst

Approved by: Paul Parker,
Digital Director

Q 1. FIND OUT THE MAIL SERVERS OF THE FOLLOWING DOMAIN:

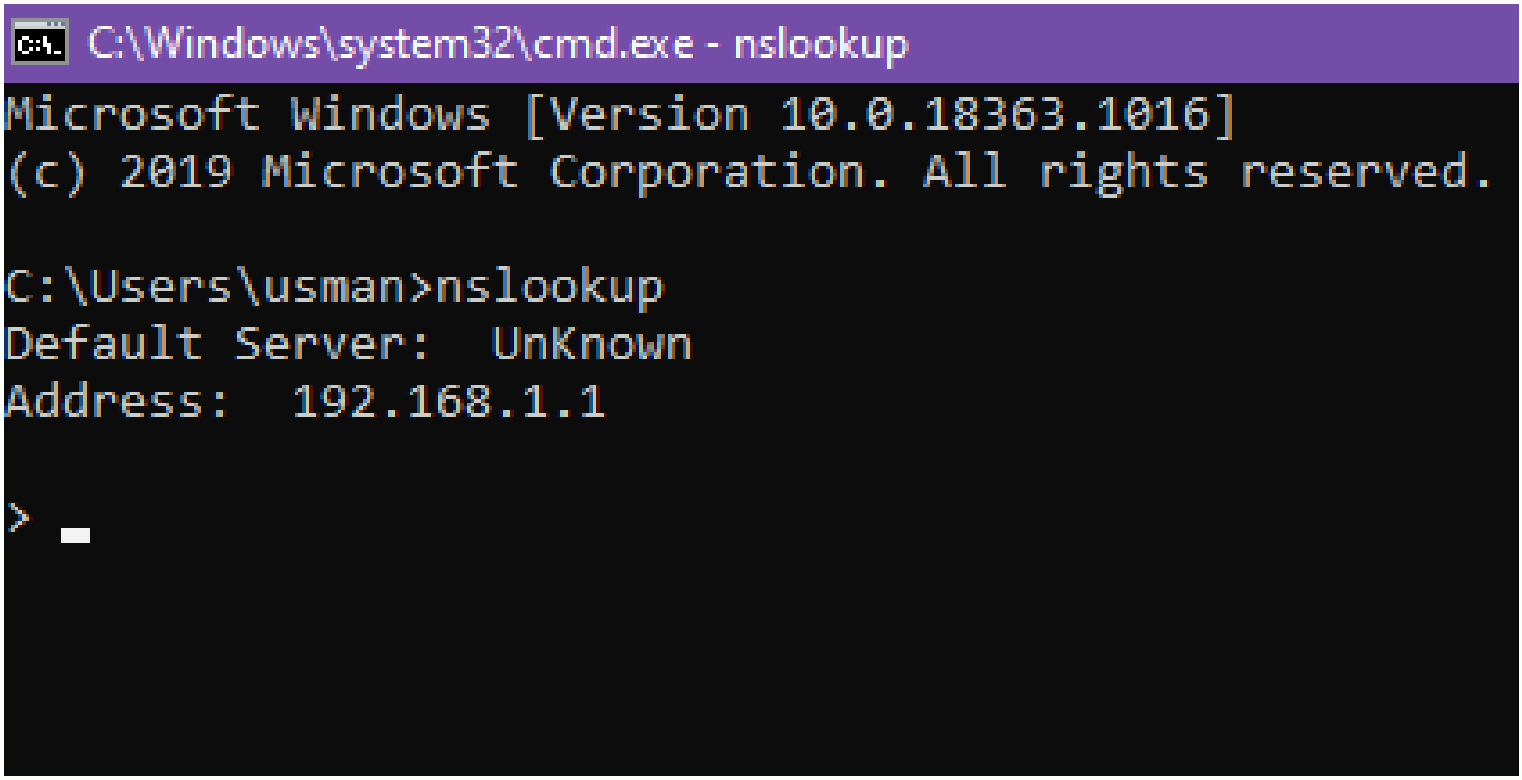
A) IBM.COM

B) WIPRO.COM

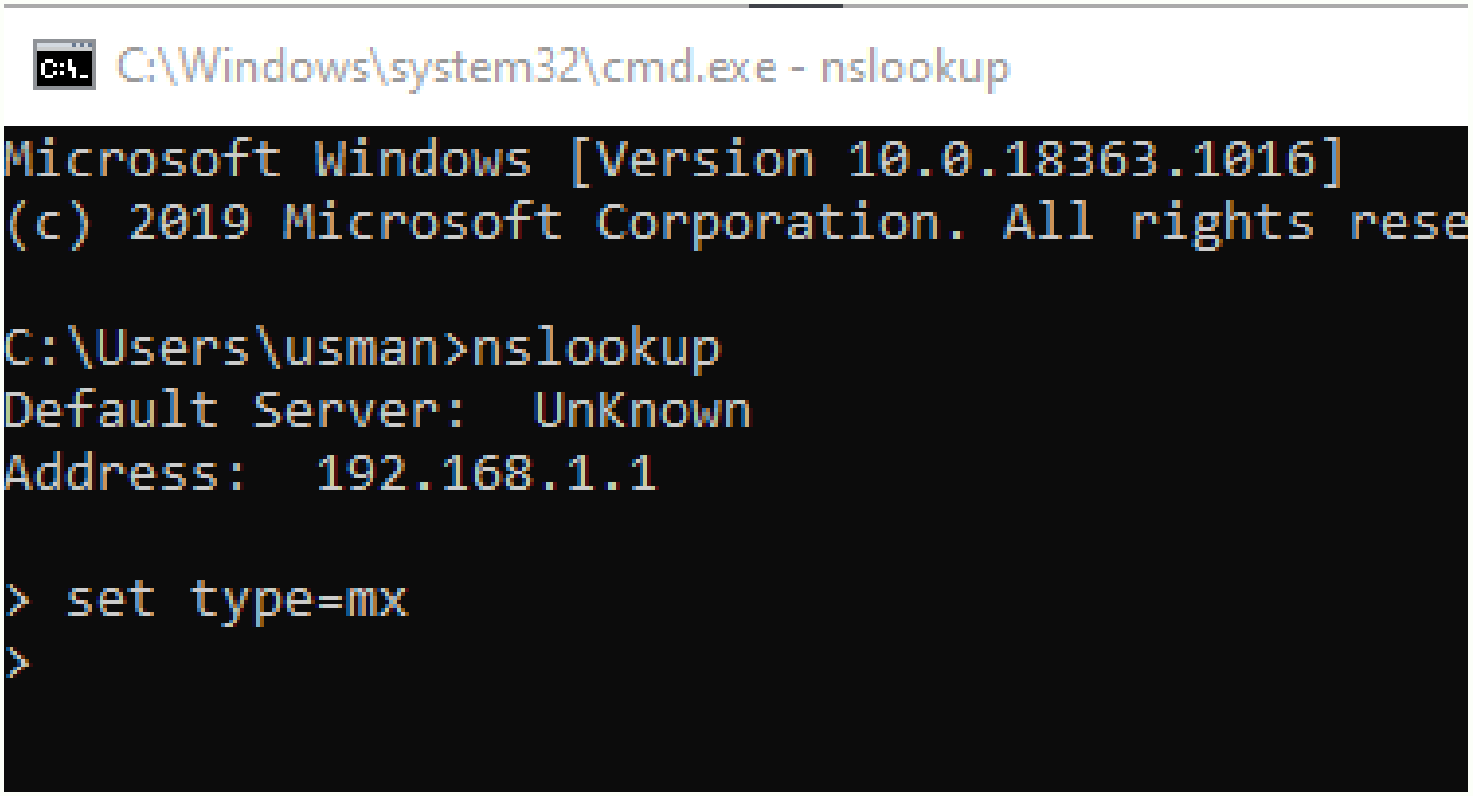
ANSWER: I AM USING THE WINDOWS COMMAND PROMPT IN PENTESTER-WIN-2016 VIRTUAL MACHINE FOR SOLVING THIS QUESTION

A) IBM.COM

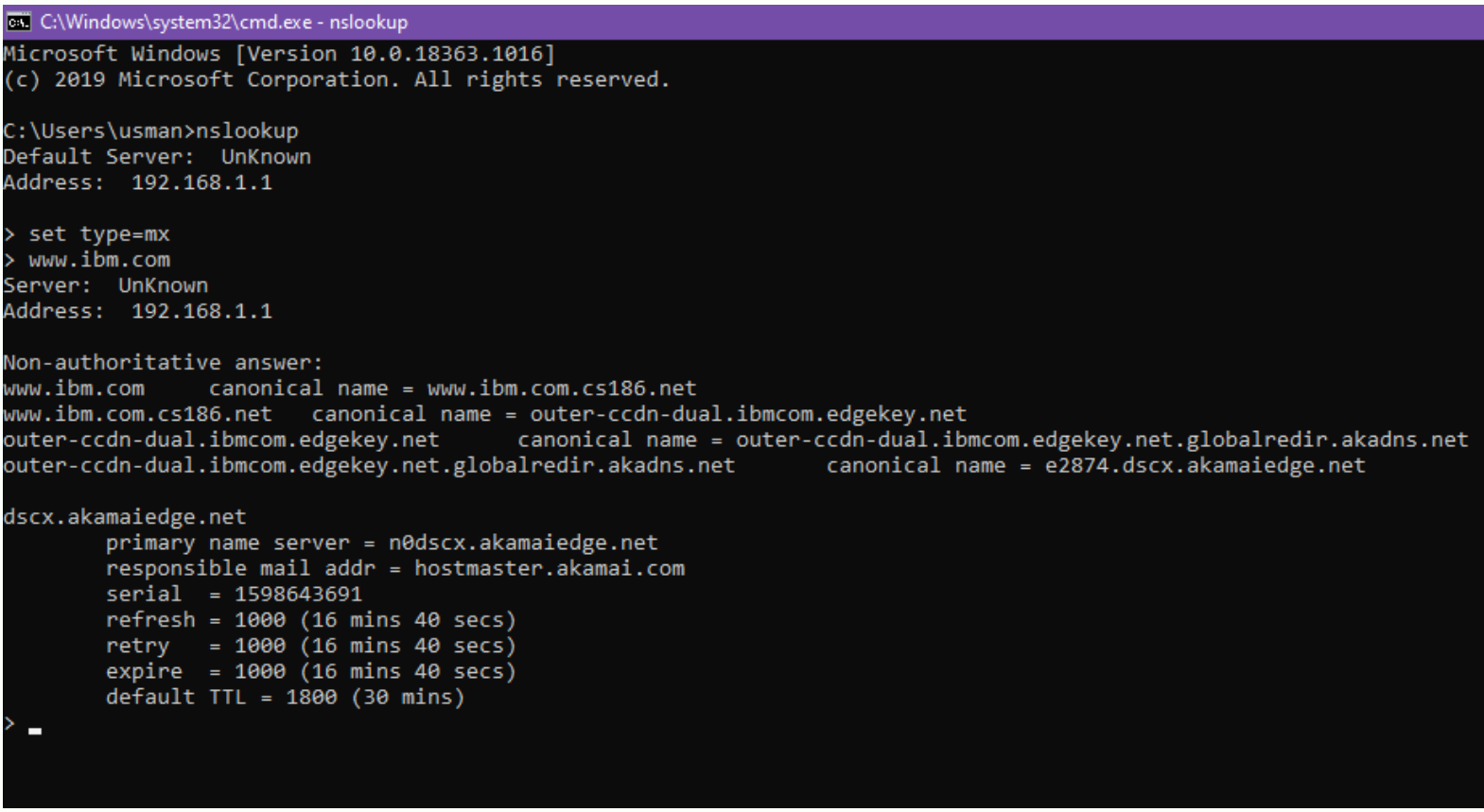
STEP 1: OPEN CMD AND TYPE NSLOOKUP AND PRESS ENTER



Step 2: Now type set type=mx and press enter



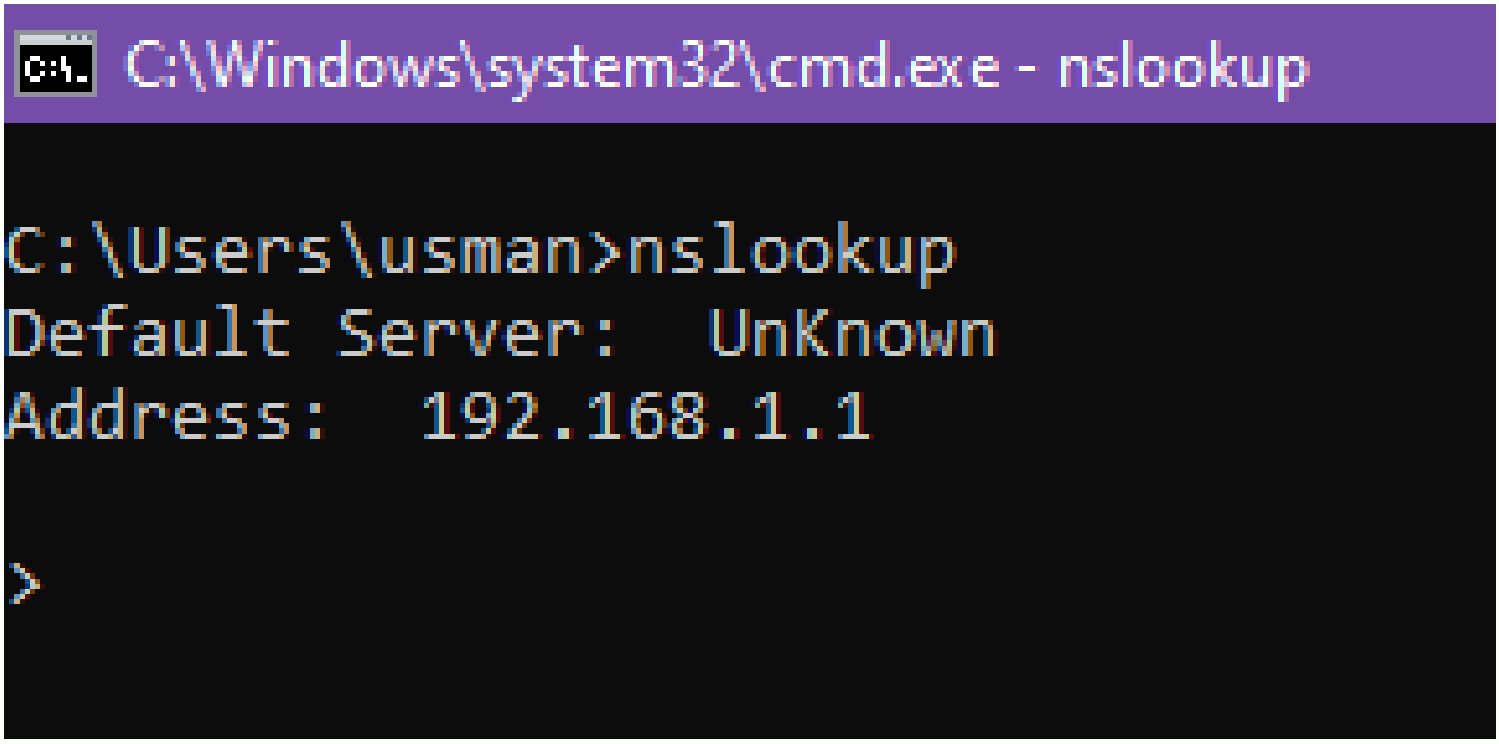
Step 3: Now type the web address whose mail server we want (in this case it is www.ibm.com)



By this process we get the required mail server.
In this case the mail server is hostmaster.akamai.com

b) wipro.com

Step 1: Open cmd and type nslookup and press enter



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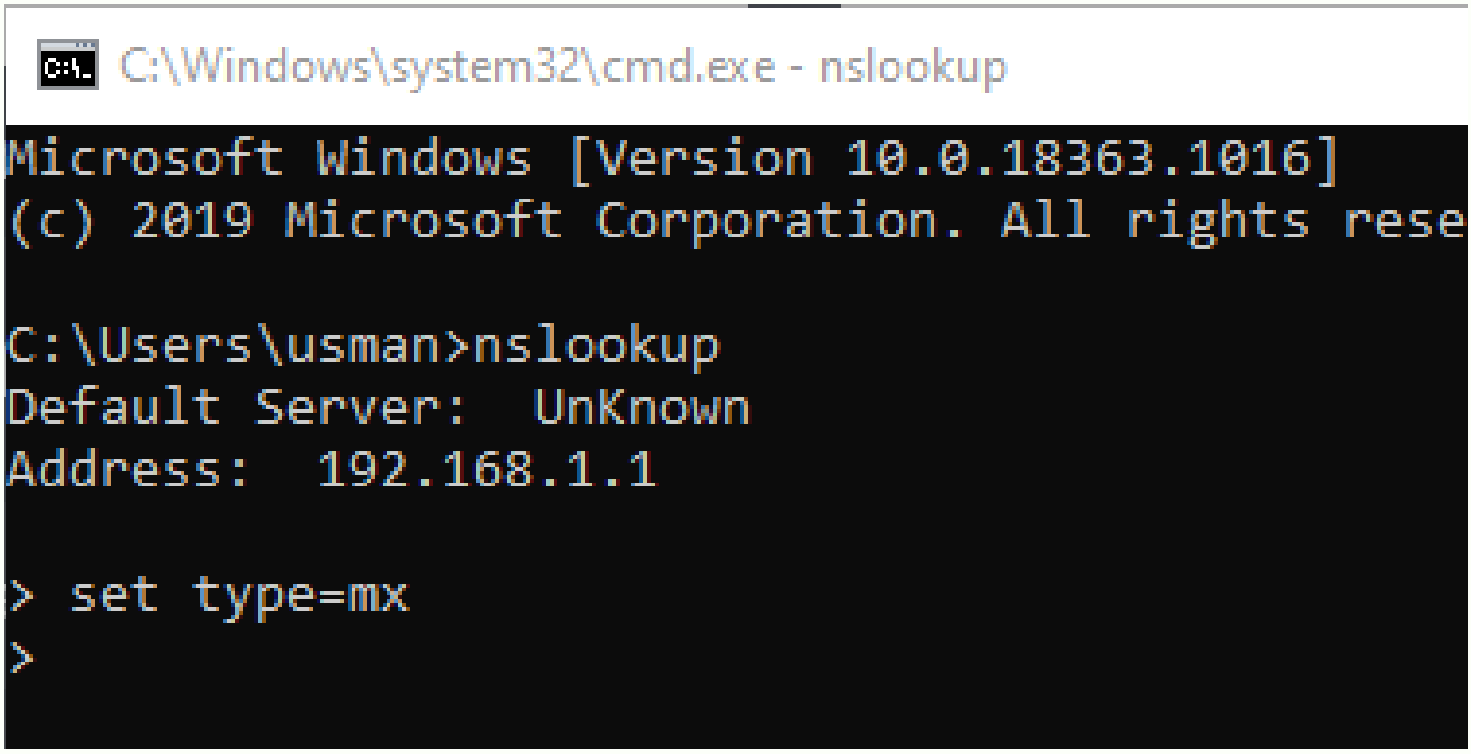
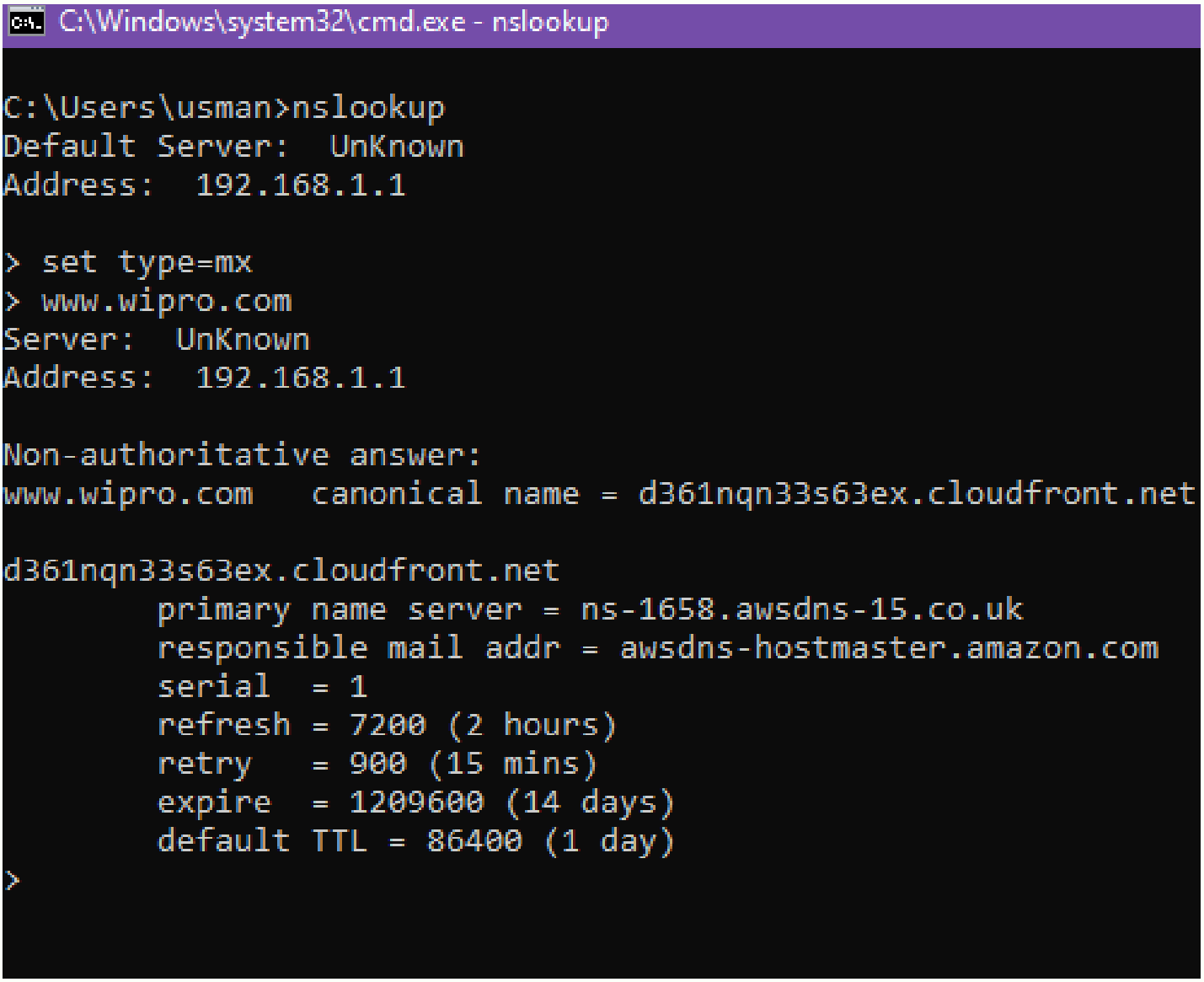


Step 3: Now type the web address whose mail server we want. (In this case it is www.wipro.com)

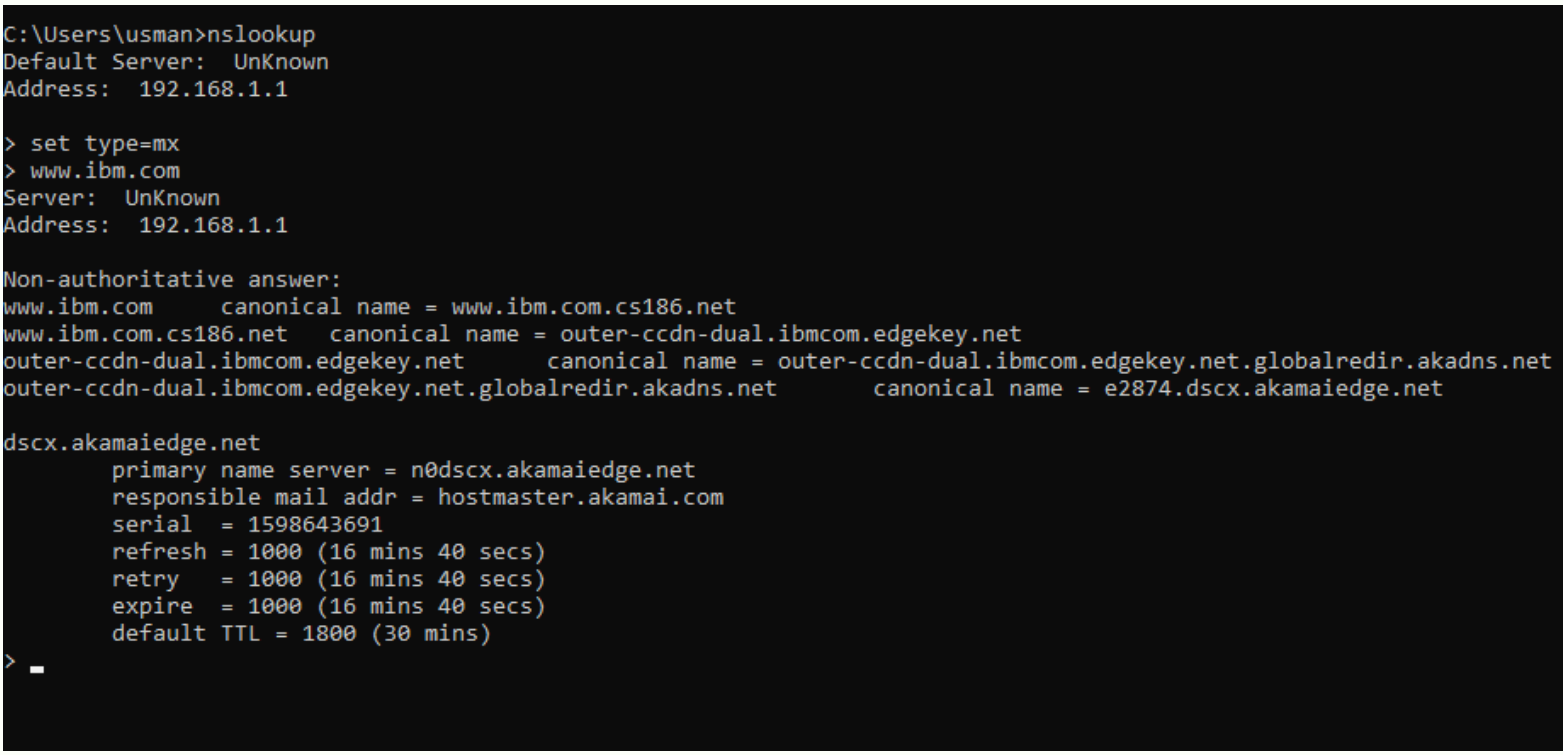


Q 2. Find the locations, where these email servers are hosted

Answer: continuation of Q1.

a) ibm.com

Step 1: Open CMD >type and enter nslookup> set type=mx> ibm.com



Step 2: Open a browser and go to https://tools.keycdn.com/geo?host=mx0a-001b2d01.pphosted.com or any other IP location finder. Enter the IP address/hostname to get the results.

Address 1: mx0b-001b2d01.pphosted.com

LOCATION	
Country	United States (US)
Continent	North America (NA)
Coordinates	37.751 (lat) / -97.822 (long)
Time	2020-08-28 14:47:06 (America/Chicago)

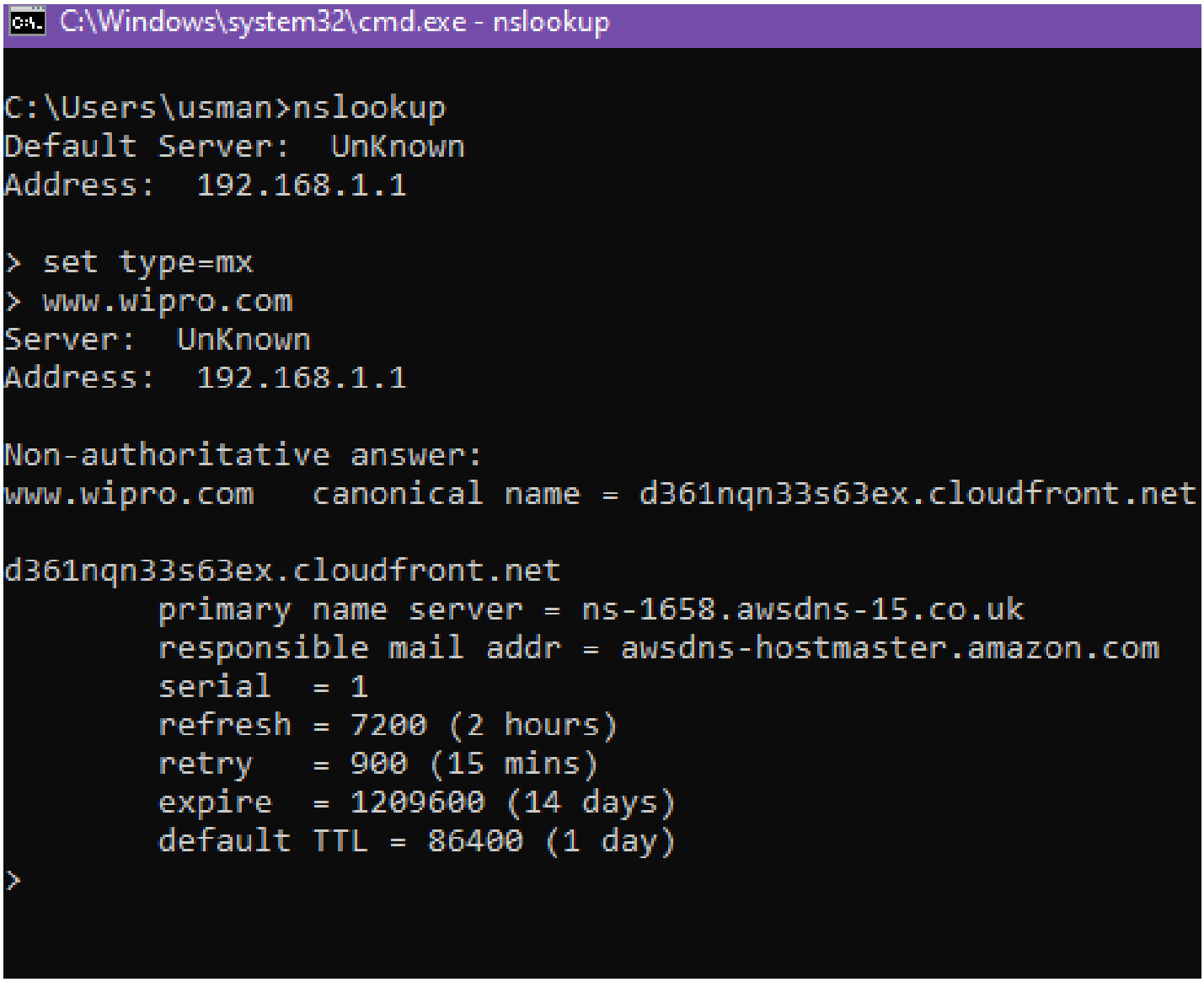
NETWORK	
IP address	148.163.158.5
Hostname	mx0b-001b2d01.pphosted.com
Provider	PROOFPOINT-ASN-US-EAST
ASN	22843

Address 2: mx0a-001b2d01.pphosted.com

LOCATION	
Country	United States (US)
Continent	North America (NA)
Coordinates	37.751 (lat) / -97.822 (long)
Time	2020-08-28 14:45:24 (America/Chicago)
NETWORK	
IP address	148.163.156.1
Hostname	mx0a-001b2d01.pphosted.com

b) wipro.com

Step 1: Open CMD >type and enter nslookup> set type=mx> wipro.com



Step 2: Open a browser and go to https://tools.keycdn.com/geo?host=mx0a-001b2d01.pphosted.com or any other IP location finder. Enter the IP address/hostname to get the results.

Address: wipro-com.mail.protection.outlook.com

LOCATION	
City	Singapore
Postal code	18
Country	Singapore (SG)
Continent	Asia (AS)
Coordinates	1.2929 (lat) / 103.8547 (long)
Time	2020-08-27 20:12:49 (Asia/Singapore)
NETWORK	
IP address	104.47.125.36
Hostname	mail-sg2apc010036.inbound.protection.outlook.com
Provider	MICROSOFT-CORP-MSN-AS-BLOCK
ASN	8075

Q 3. Scan and find out port numbers open 203.163.246.23

Answer: I will be using Kali Linux 2020.3 in VMware.

Step 1: Open the terminal and go to administrator mode

Command: sudo su –

(enter password and hit enter to enter administrator mode)

Step 2: In order to detect the open ports type nmap 203.163.246.23 and hit enter.

```
root@kali:~# nmap 203.163.246.23
Starting Nmap 7.80 ( https://nmap.org ) at 2020-08-27 12:12 EDT
Nmap scan report for 203.163.246.23
Host is up (0.061s latency).
Not shown: 999 filtered ports
PORT    STATE SERVICE
110/tcp open  pop3

Nmap done: 1 IP address (1 host up) scanned in 55.26 seconds
```

Therefore, one port is open as shown in the screenshot.

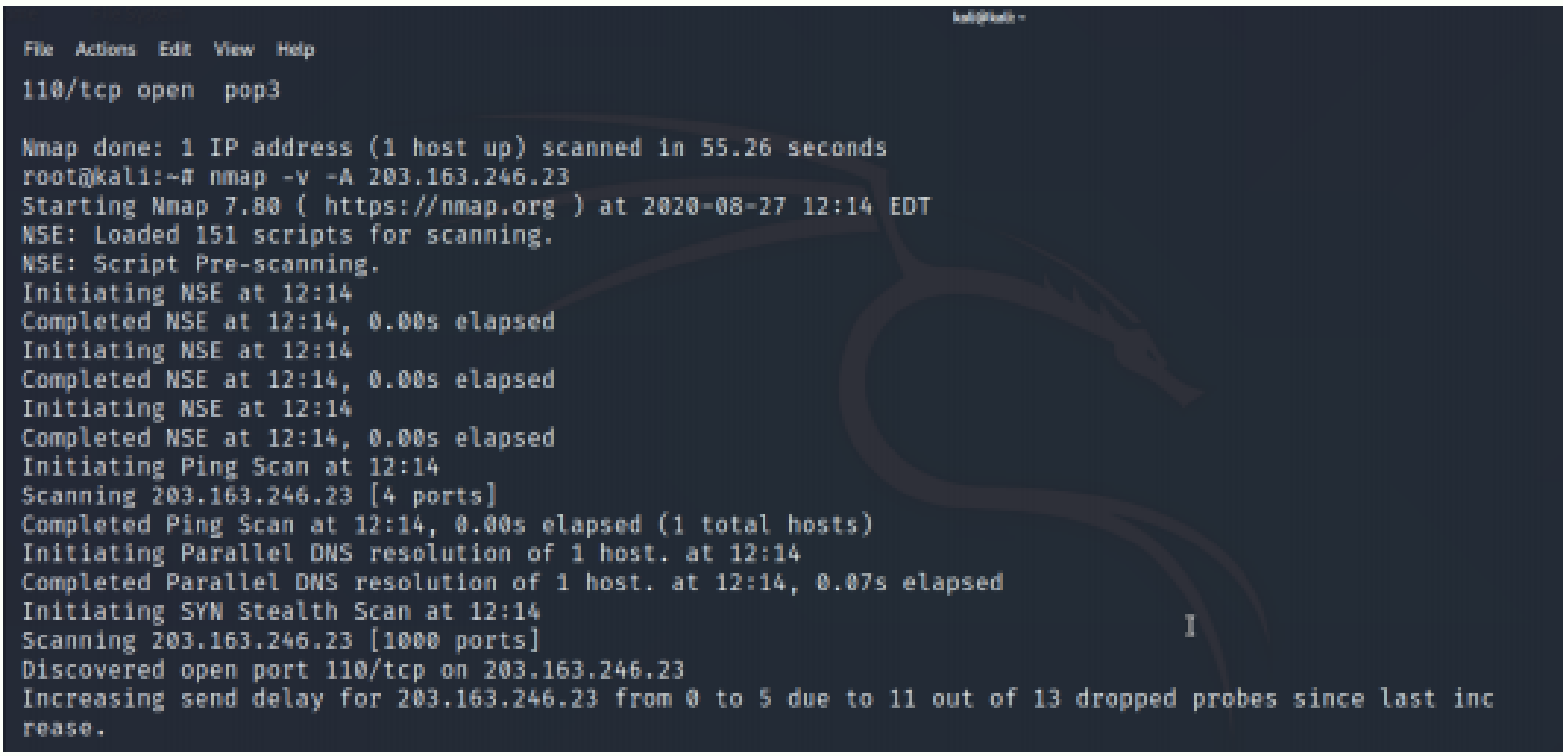
(Performing more scans) nmap -v -A 203.163.246.23

```
File  Actions  Edit  View  Help
Completed Ping Scan at 12:14, 0.00s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 12:14
Completed Parallel DNS resolution of 1 host. at 12:14, 0.07s elapsed
Initiating SYN Stealth Scan at 12:14
Scanning 203.163.246.23 [1000 ports]
Discovered open port 110/tcp on 203.163.246.23
Increasing send delay for 203.163.246.23 from 0 to 5 due to 11 out of 13 dropped probes since last inc
rease.
Increasing send delay for 203.163.246.23 from 5 to 10 due to 11 out of 11 dropped probes since last in
crease.
Completed SYN Stealth Scan at 12:15, 52.22s elapsed (1000 total ports)
Initiating Service scan at 12:15
Scanning 1 service on 203.163.246.23
Stats: 0:02:54 elapsed; 0 hosts completed (1 up), 1 undergoing Service Scan
Service scan Timing: About 0.00% done
Completed Service scan at 12:18, 156.36s elapsed (1 service on 1 host)
Initiating OS detection (try #1) against 203.163.246.23
Initiating Traceroute at 12:18
Completed Traceroute at 12:18, 0.03s elapsed
Initiating Parallel DNS resolution of 2 hosts. at 12:18
Completed Parallel DNS resolution of 2 hosts. at 12:18, 2.02s elapsed
NSE: Script scanning 203.163.246.23.
Initiating NSE at 12:18
Completed NSE at 12:18, 21.22s elapsed
Initiating NSE at 12:18
Completed NSE at 12:19, 21.05s elapsed
Initiating NSE at 12:19
Completed NSE at 12:19, 0.00s elapsed
Nmap scan report for 203.163.246.23
Host is up (0.0024s latency).
Not shown: 999 filtered ports
PORT    STATE SERVICE VERSION
```

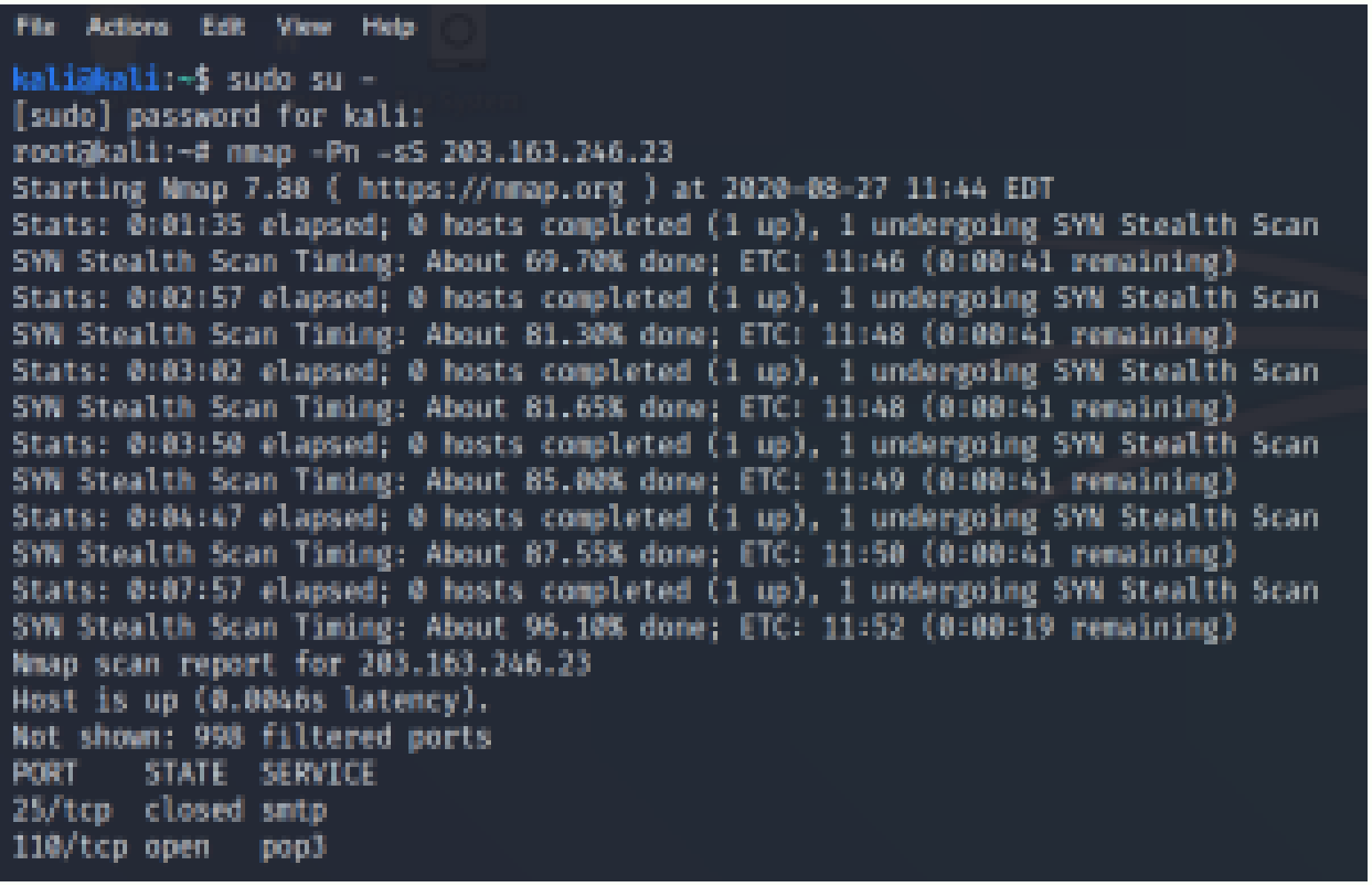
```
File  Actions  Edit  View  Help
Not shown: 999 filtered ports
PORT    STATE SERVICE VERSION
110/tcp open  pop3?
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: WAP|general purpose
Running: Actiontec embedded, Linux 2.4.X|3.X, Microsoft Windows XP|7|2012
OS CPE: cpe:/h:actiontec:mi424wr-gen3i cpe:/o:linux:linux_kernel cpe:/o:linux:linux_kernel:2.4.37 cpe:
/o:linux:linux_kernel:3.2 cpe:/o:microsoft:windows_xp::sp3 cpe:/o:microsoft:windows_7 cpe:/o:microsoft
:windows_server_2012
OS details: Actiontec MI424WR-GEN3I WAP, DD-WRT v24-sp2 (Linux 2.4.37), Linux 3.2, Microsoft Windows X
P SP3, Microsoft Windows XP SP3 or Windows 7 or Windows Server 2012
Network Distance: 2 hops
TCP Sequence Prediction: Difficulty=256 (Good luck!)
IP ID Sequence Generation: Incremental

TRACEROUTE (using port 80/tcp)
HOP RTT     ADDRESS
1   0.14 ms 192.168.111.2
2   0.05 ms 203.163.246.23

NSE: Script Post-scanning.
Initiating NSE at 12:19
Completed NSE at 12:19, 0.00s elapsed
Initiating NSE at 12:19
Completed NSE at 12:19, 0.00s elapsed
Initiating NSE at 12:19
Completed NSE at 12:19, 0.00s elapsed
Read data files from: /usr/bin/../share/nmap
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 255.26 seconds
           Raw packets sent: 2086 (93.988KB) | Rcvd: 499 (20.024KB)
root@kali:~#
```



Command: Nmap -Pn -sS 203.163.246.23



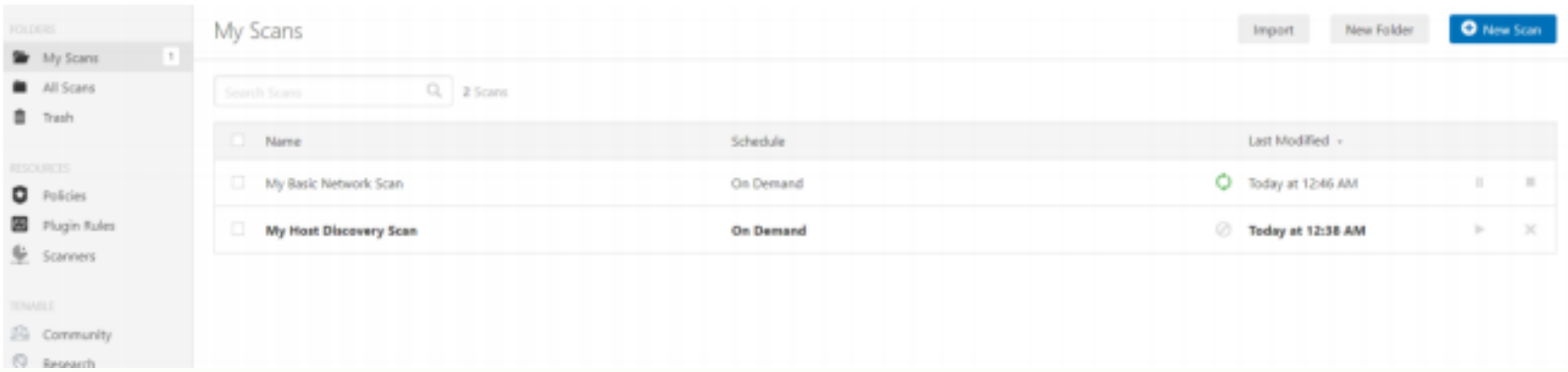
Q 4. Install Nessus in a VM and scan your laptop/desktop for CVE

Answer:

Step 1: Open Pentester-Win 2016 VM and install Nessus in it and open it in a suitable browser.

Step 2: Enter the Ipv4 address of your machine in the popup box and start Scanning.

Step 3: The scan is now running. Wait for few seconds until the scan is over.



Step 4: Once the Scan is over, we can see the reports. (Click the Vulnerabilities tab to view the reports)