

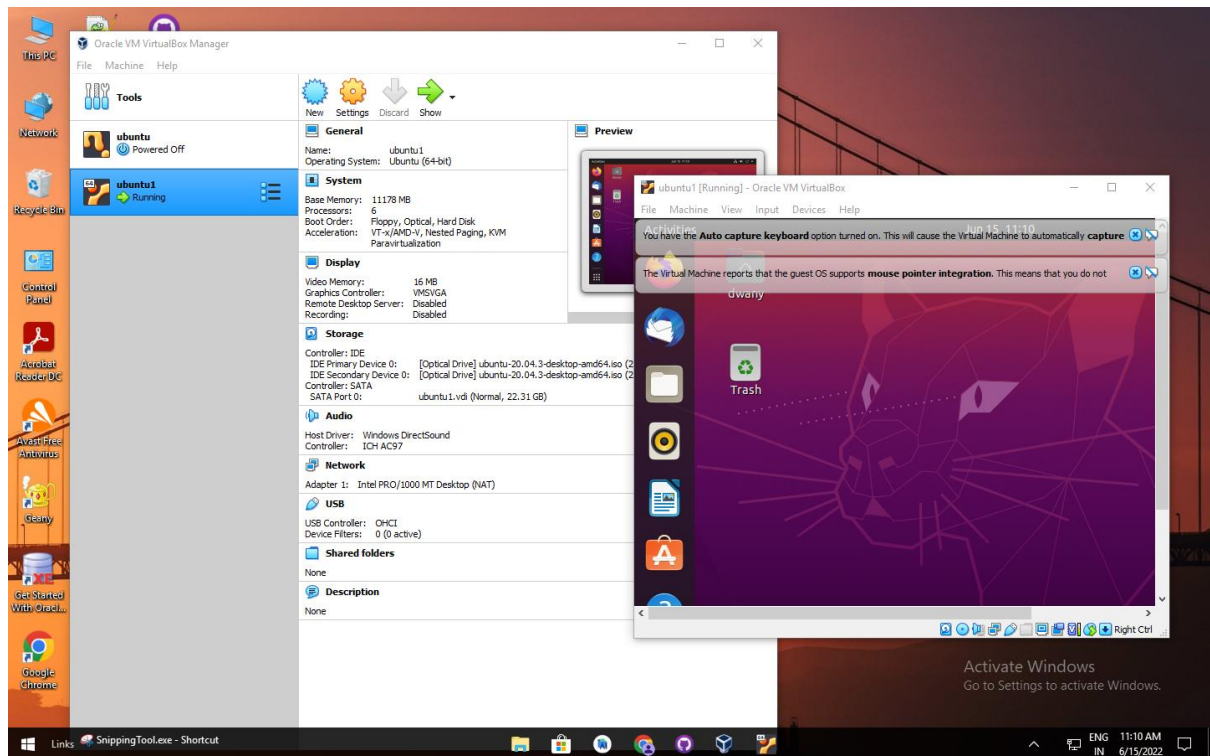
ACN LAB EXAM

Dwany D S

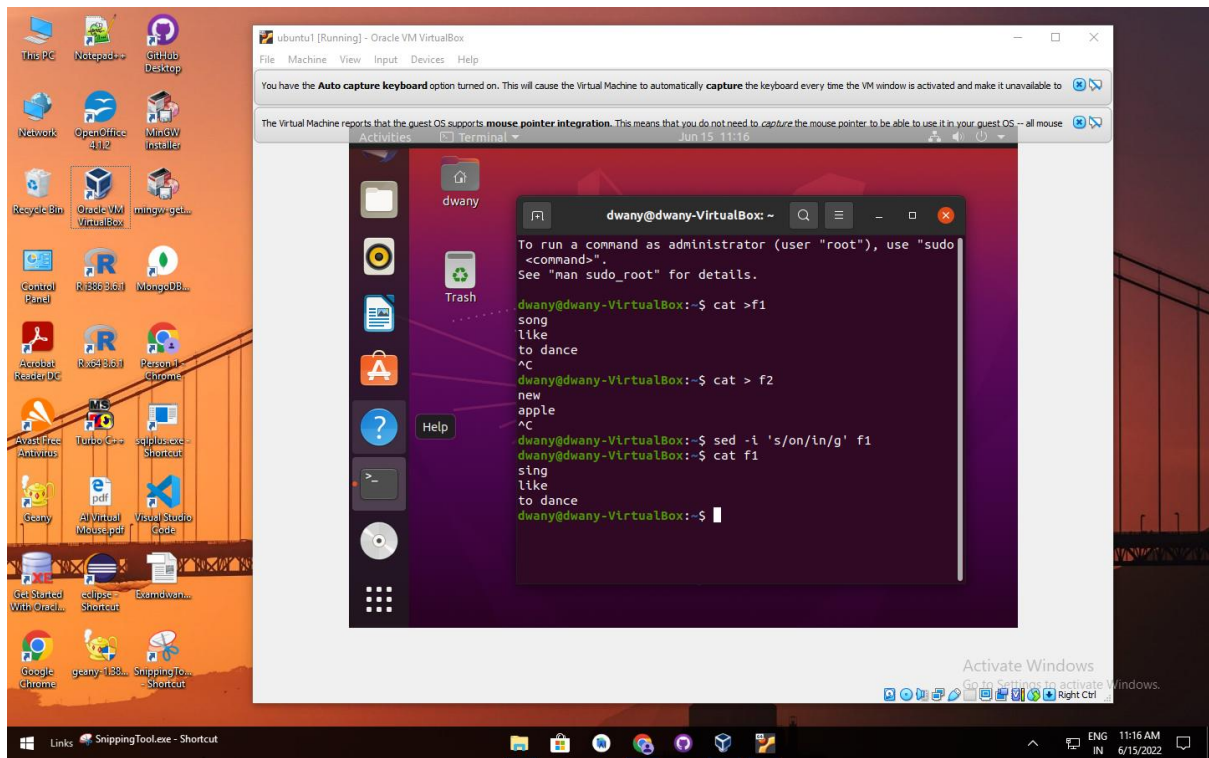
Roll no:217

S2 mca

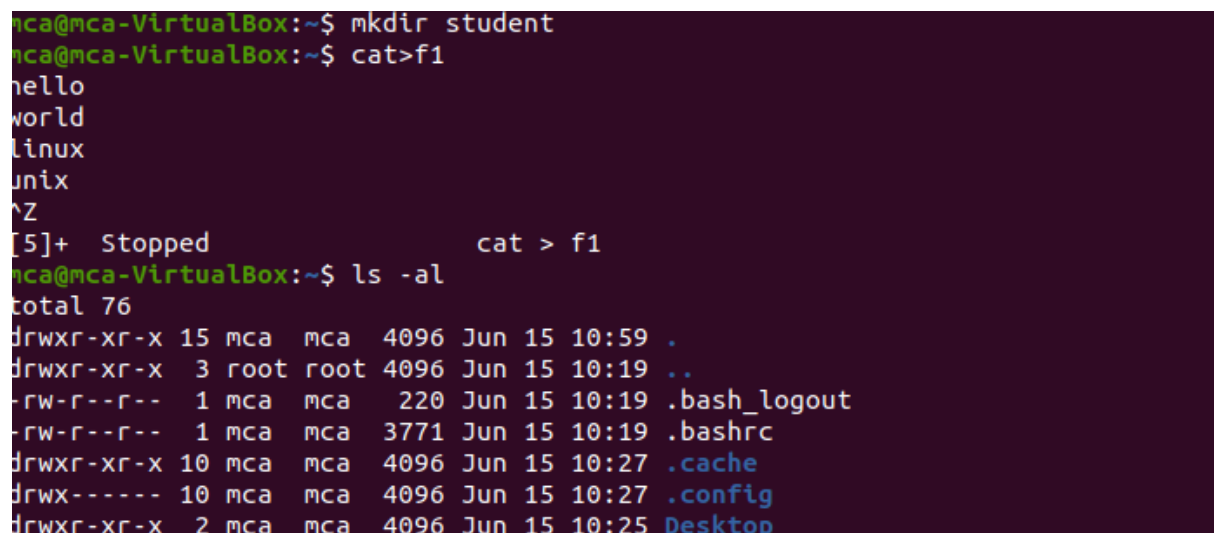
1)install linux on virtual box in windows 10



2) use sed command to replace the content of the file



3) create a directory to create file and access



```
mca@mca-VirtualBox:~$ chmod o=rwx f1
mca@mca-VirtualBox:~$ ls -al
total 76
drwxr-xr-x 15 mca mca 4096 Jun 15 10:59 .
drwxr-xr-x  3 root root 4096 Jun 15 10:19 ..
-rw-r--r--  1 mca mca  220 Jun 15 10:19 .bash_logout
-rw-r--r--  1 mca mca 3771 Jun 15 10:19 .bashrc
drwxr-xr-x 10 mca mca 4096 Jun 15 10:27 .cache
drwx----- 10 mca mca 4096 Jun 15 10:27 .config
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Desktop
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Documents
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Downloads
-rw-rw-rwx  1 mca mca   24 Jun 15 10:59 f1
-rw-rw-r--  1 mca mca    0 Jun 15 10:31 f2
drwx-----  3 mca mca 4096 Jun 15 10:25 .gnupg
drwxr-xr-x  3 mca mca 4096 Jun 15 10:25 .local
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Music
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Pictures
-rw-r--r--  1 mca mca  807 Jun 15 10:19 .profile
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Public
drwxrwxr-x  2 mca mca 4096 Jun 15 10:59 student
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Templates
drwxr-xr-x  2 mca mca 4096 Jun 15 10:25 Videos
mca@mca-VirtualBox:~$ chmod g=rwx f1
mca@mca-VirtualBox:~$ ls -al
total 76
drwxr-xr-x 15 mca mca 4096 Jun 15 10:59 .
drwxr-xr-x  3 root root 4096 Jun 15 10:19 ..
-rw-r--r--  1 mca mca  220 Jun 15 10:19 .bash_logout
```

```
drwxrwxr-x  2 mca  mca  4096 Jun 15 10:59 student
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Templates
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Videos
mca@mca-VirtualBox:~$ chmod o=r f1
mca@mca-VirtualBox:~$ chmod g=rx f1
mca@mca-VirtualBox:~$ chmod u=rwx f1
mca@mca-VirtualBox:~$ ls -al
total 76
drwxr-xr-x 15 mca  mca  4096 Jun 15 10:59 .
drwxr-xr-x  3 root root 4096 Jun 15 10:19 ..
-rw-r--r--  1 mca  mca   220 Jun 15 10:19 .bash_logout
-rw-r--r--  1 mca  mca  3771 Jun 15 10:19 .bashrc
drwxr-xr-x 10 mca  mca  4096 Jun 15 10:27 .cache
drwx----- 10 mca  mca  4096 Jun 15 10:27 .config
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Desktop
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Documents
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Downloads
-rwxr-xr--  1 mca  mca    24 Jun 15 10:59 f1
-rw-rw-r--  1 mca  mca     0 Jun 15 10:31 f2
drwx-----  3 mca  mca  4096 Jun 15 10:25 .gnupg
drwxr-xr-x  3 mca  mca  4096 Jun 15 10:25 .local
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Music
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Pictures
-rw-r--r--  1 mca  mca   807 Jun 15 10:19 .profile
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Public
drwxrwxr-x  2 mca  mca  4096 Jun 15 10:59 student
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Templates
drwxr-xr-x  2 mca  mca  4096 Jun 15 10:25 Videos
mca@mca-VirtualBox:~$
```

```
Activities Terminal Jun 15 11:16
mca@mca-VirtualBox: ~
drwxrwxr-x 2 mca mca 4096 Jun 15 10:59 student
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Templates
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Videos
mca@mca-VirtualBox:~$ chmod o=r f1
mca@mca-VirtualBox:~$ chmod g=rx f1
mca@mca-VirtualBox:~$ chmod u=rwx f1
mca@mca-VirtualBox:~$ ls -al
total 76
drwxr-xr-x 15 mca mca 4096 Jun 15 10:59 .
drwxr-xr-x 3 root root 4096 Jun 15 10:19 ..
-rw-r--r-- 1 mca mca 220 Jun 15 10:19 .bash_logout
-rw-r--r-- 1 mca mca 3771 Jun 15 10:19 .bashrc
drwxr-xr-x 10 mca mca 4096 Jun 15 10:27 .cache
drwx----- 10 mca mca 4096 Jun 15 10:27 .config
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Desktop
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Documents
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Downloads
-rwxr-xr-- 1 mca mca 24 Jun 15 10:59 f1
-rw-rw-r-- 1 mca mca 0 Jun 15 10:31 f2
drwx----- 3 mca mca 4096 Jun 15 10:25 .gnupg
drwxr-xr-x 3 mca mca 4096 Jun 15 10:25 .local
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Music
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Pictures
-rw-r--r-- 1 mca mca 807 Jun 15 10:19 .profile
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Public
drwxrwxr-x 2 mca mca 4096 Jun 15 10:59 student
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Templates
drwxr-xr-x 2 mca mca 4096 Jun 15 10:25 Videos
mca@mca-VirtualBox:~$
```

5)

a)

Capturing from Ethernet

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

Apply a display filter: <Ctrl-F>

No.	Time	Source	Destination	Protocol	Length	Info
1839	12:08:07.266955	fe80::bd24:8264:227...	ff02::1:ff6b:fcfb	ICMPv6	86	Neighbor Solicitation for fe80::3d8e:52d2:a6b:fcfb from f4:39:09:2e:67:3f
1840	12:08:07.269803	HewlettP_07:a4:26	Broadcast	ARP	60	Who has 172.20.103.5? Tell 172.20.21.21
1841	12:08:07.292740	172.20.30.117	239.255.255.250	SSDP	216	M-SEARCH * HTTP/1.1
1842	12:08:07.299354	fe80::bd09:a4fa:959...	ff02::1:2	DHCPv6	157	Solicit XID: 0x1819e5 CID: 000100011bc768a1e0d5b9e90a5
1843	12:08:07.301806	fe80::d51f:22de:58a...	ff02::1:ff6b:fcfb	ICMPv6	86	Neighbor Solicitation for fe80::3d8e:52d2:a6b:fcfb from f4:39:09:2e:68:b1
1844	12:08:07.306074	Sophos_6b:b3:da	Broadcast	ARP	60	Who has 172.20.103.2? Tell 172.20.6.1
1845	12:08:07.376633	CNUTHUS.local	239.255.102.18	UDP	191	51704 → 50001 Len=149
1846	12:08:07.377855	CNUTHUS.local	239.255.102.18	UDP	191	51705 → 50002 Len=149
1847	12:08:07.379103	CNUTHUS.local	239.255.102.18	UDP	191	51706 → 50003 Len=149
1848	12:08:07.394201	172.20.30.204	239.255.255.250	SSDP	477	NOTIFY * HTTP/1.1
1849	12:08:07.395137	fe80::bd09:a4fa:959...	ff02::c	SSDP	505	NOTIFY * HTTP/1.1
1850	12:08:07.419688	CNUTHUS.local	239.255.255.250	SSDP	179	M-SEARCH * HTTP/1.1
1851	12:08:07.441489	HewlettP_07:a4:26	Broadcast	ARP	60	Who has 172.20.103.1? Tell 172.20.21.21
1852	12:08:07.441489	HewlettP_07:a4:26	Broadcast	ARP	60	Who has 172.20.103.2? Tell 172.20.21.21
1853	12:08:07.441489	HewlettP_07:a4:26	Broadcast	ARP	60	Who has 172.20.103.3? Tell 172.20.21.21
1854	12:08:07.472988	HewlettP_07:a4:26	Broadcast	ARP	60	Who has 172.20.103.6? Tell 172.20.21.21
1855	12:08:07.509262	Sophos_6b:b3:da	Broadcast	ARP	60	Who has 172.20.103.3? Tell 172.20.6.1
1856	12:08:07.509262	IntelCor_69:60:6f	Broadcast	ARP	60	Who has 34.202.185.163? Tell 172.20.0.2
1857	12:08:07.524745	172.20.30.39	224.0.0.252	LLMNR	64	Standard query 0x6e01 A wpad
1858	12:08:07.600368	140.82.114.25	172.20.31.9	TLSv1.2	79	Application Data

> Frame 1: 86 bytes on wire (688 bits), 86 bytes captured (688 bits) on interface \Device\NPF_{5A03F680-E166-42DF-BCC6-9B48DB66E6AD}, id 0
> Ethernet II, Src: HewlettP_03:7d:ba (10:62:e5:03:7d:ba), Dst: IPv6mcast_ff:4a:15:1e (33:33:ff:4a:15:1e)
> Internet Protocol Version 6, Src: fe80::280a:6696:a740:1a16 (fe80::280a:6696:a740:1a16), Dst: ff02::1:ff4a:151e (ff02::1:ff4a:151e)
> Internet Control Message Protocol v6

0000 33 33 ff 4a 15 1e 10 62 e5 03 7d ba 86 dd 60 00 33 - - - - -
0010 00 00 00 20 3a ff fe 80 00 00 00 00 00 28 0a - - - - -
0020 66 96 af 40 1a 16 ff 02 00 00 00 00 00 00 00 f - - - - -
0030 00 01 ff 4a 15 1e 87 00 0d d3 00 00 00 fe 00 - - - - -
0040 00 00 00 00 00 00 00 71 31 c1 b0 46 4a 15 1e 01 01 - - - - -
0050 10 62 e5 03 7d ba - - - - -

Activate Windows
Go to Settings to activate Windows.

Ethernet: <live capture in progress> | Packets: 1858 · Displayed: 1858 (100.0%) | Profile: Default

Links SnippingTool.exe - Shortcut

b)

The image shows a Wireshark network traffic capture of an HTTP session. The top pane displays a list of captured packets, with the selected packet (No. 12227) highlighted. The middle pane shows the details of the selected packet, including the Host, Connection, User-Agent, Accept, Referer, and Accept-Encoding headers. The bottom pane shows the raw packet data in hexadecimal and ASCII format.

No.	Time	Source	Destination	Protocol	Length	Info
1050	12:08:01.100751	172.20.31.9	ai488.dscd.akamai.n...	HTTP	136	GET /ncc.txt HTTP/1.1
1060	12:08:01.160395	172.20.31.9	ai488.dscd.akamai.n...	HTTP	205	HTTP/1.1 200 OK (text/html)
12216	12:09:34.393858	172.20.31.9	14.139.185.154	HTTP	517	GET / HTTP/1.1
12220	12:09:34.458599	14.139.185.154	172.20.31.9	HTTP	333	HTTP/1.1 302 Found
12227	12:09:34.523906	172.20.31.9	14.139.185.154	HTTP	525	GET /kuhs_new/ HTTP/1.1
12265	12:09:35.090781	14.139.185.154	172.20.31.9	HTTP	412	HTTP/1.1 200 OK (text/html)
12285	12:09:35.205222	172.20.31.9	14.139.185.154	HTTP	451	GET /kuhs_new/home/images/e1.jpg HTTP/1.1
12310	12:09:35.273403	14.139.185.154	172.20.31.9	HTTP	505	HTTP/1.1 404 Not Found (text/html)
12311	12:09:35.274156	172.20.31.9	14.139.185.154	HTTP	534	GET /kuhs_new/ HTTP/1.1
12514	12:09:36.018583	14.139.185.154	172.20.31.9	HTTP	411	HTTP/1.1 200 OK (text/html)
12558	12:09:36.189072	172.20.31.9	14.139.185.154	HTTP	451	GET /kuhs_new/home/images/e1.jpg HTTP/1.1
12579	12:09:36.256838	14.139.185.154	172.20.31.9	HTTP	505	HTTP/1.1 404 Not Found (text/html)
12946	12:09:40.202409	172.20.31.9	connectivity-check...	HTTP	141	GET / HTTP/1.1
12965	12:09:40.474874	connectivity-check...	172.20.31.9	HTTP	202	HTTP/1.1 204 No Content
14563	12:10:03.410774	172.20.31.9	103.251.43.195	HTTP	602	GET / HTTP/1.1
14567	12:10:03.431908	103.251.43.195	172.20.31.9	HTTP	226	HTTP/1.1 304 Not Modified
14576	12:10:03.537010	172.20.31.9	14.139.185.154	HTTP	517	GET / HTTP/1.1
14588	12:10:03.602919	14.139.185.154	172.20.31.9	HTTP	333	HTTP/1.1 302 Found
14589	12:10:03.604913	172.20.31.9	14.139.185.154	HTTP	525	GET /kuhs_new/ HTTP/1.1
14665	12:10:04.381184	14.139.185.154	172.20.31.9	HTTP	413	HTTP/1.1 200 OK (text/html)
14695	12:10:04.481675	172.20.31.9	14.139.185.154	HTTP	451	GET /kuhs_new/home/images/e1.jpg HTTP/1.1

Host: 14.139.185.154\r\n
Connection: keep-alive\r\n
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/102.0.0.0 Safari/537.36\r\n
Accept: image/avif,image/webp,image/apng,image/svg+xml,image/*,*/*;q=0.8\r\n
Referer: http://14.139.185.154/kuhs_new/\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: en-US,en;q=0.9\r\n
[Full request URI: http://14.139.185.154/kuhs_new/home/images/e1.jpg]
[HTTP request 2/4]
[Prev request in frame: 12227]
[Response in frame: 12310]
[Next request in frame: 12311]

0000 00 1a 8c 6b b3 da f4 39 09 2e 8c f8 08 00 45 00 ...k...9E
0010 01 b5 7c 3e 40 08 00 06 e9 c1 ac 14 1f 09 0e 8b ...}0.....
0020 b9 9a d3 69 00 50 be 55 07 b4 2b 81 a4 3e 50 18 ...iP-U...+...P
0030 01 03 4f fa 00 00 47 45 54 20 2f 6b 75 68 73 5f ...O...GE T /kuhs_
0040 6e 65 77 2f 68 6f 6d 65 2f 69 6d 61 67 65 73 2f new/home /images/
0050 65 31 2e 6a 70 67 20 48 54 54 50 2f 31 2e 31 0d e1.jpg H TTP/1.1
0060 0a 40 6f 73 74 3a 20 31 34 2e 31 33 39 2e 31 30 Host: 14.139.18
0070 35 2e 31 35 34 0d 04 43 6f 6e 6e 65 63 74 69 6f 5.154..C connectio

c)