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Mal Assignment

a. 08:00:27:19:60:88

b. 10.0.2.15

c. 08:00:27:1c:37:d6

d. 10.0.2.4

E.

```
➥ netstat -r
Kernel IP routing table
Destination        Gateway            Genmask           Flags   MSS Window  irtt Iface
0.0.0.0            10.0.2.2          0.0.0.0           UG      0 0        0 eth0
10.0.2.0           0.0.0.0           255.255.255.0     U        0 0        0 eth0
ettercap 0.8.3.1 copyright 2001-2020 Ettercap Development Team
(aiden@kali)-[~]
```

f.

```
➥ arp -n
Address            HWtype  HWaddress          Flags Mask          Iface
10.0.2.2           ether   52:54:00:12:35:02  C                eth0
```

g.

```
msfadmin@metasploitable:~$ netstat -r
Kernel IP routing table
Destination        Gateway            Genmask           Flags   MSS Window  irtt Iface
10.0.2.0           *                255.255.255.0     U        0 0        0 eth0
default            10.0.2.1          0.0.0.0           UG      0 0        0 eth0
msfadmin@metasploitable:~$
```

h.

```
msfadmin@metasploitable:~$ arp -n
Address            HWtype  HWaddress          Flags Mask          Iface
10.0.2.1           ether   52:54:00:12:35:00  C                eth0
```

I. 52:54:00:12:35:00, it is the first mac address on my local network I will be sending my packets.

J. I don't see a http response or any captured packets

K. **Note: I am now transitioning to the computers in Olin(since my machine is not working so the IP addresses listed above this question might be different)**

I.

```
msfadmin@metasploitable:~$ arp -n
Address      HWtype  HWaddress    Flags Mask    Iface
10.0.2.2     ether   08:00:27:A5:07:7B  C           eth0
10.0.2.3     ether   08:00:27:A5:07:7B  C           eth0
10.0.2.1     ether   08:00:27:A5:07:7B  C           eth0
msfadmin@metasploitable:~$ _
```

There are extra addresses, and all of them point to the same address(which is the kali MAC address)

m. I expect the TCP SYN packet to go to the Kali, since the physical MAC address of metasploitable is pointing to Kali.

n.

o. I do see an HTTP response on Metasploitable. I can determine that a get request was issued and a text/html packet was sent back(only looking at the http packets).

+	16	0.135028718	10.0.2.4	45.79.89.123	HTTP	212 GET / HTTP/1.1
+	19	0.187554441	45.79.89.123	10.0.2.4	HTTP	933 HTTP/1.1 200 OK (text/html)

P. It looks like the ettercap is changing metasploitable's MAC address to Kali's MAC address.

Therefore when someone wants to send Metasploitable a packet is directed to the MAC address assigned, which is Kali's address in this case.

4	0.000059366	PcsCompu_a5:07:7b	PcsCompu_f7:e6:da	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
9	0.010541060	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.2	is at 08:00:27:a5:07:7b	
10	0.010554886	PcsCompu_a5:07:7b	RealtekU_12:35:00	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
15	0.021934211	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.1	is at 08:00:27:a5:07:7b	
16	0.021948159	PcsCompu_a5:07:7b	RealtekU_12:35:00	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
21	1.032187380	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.3	is at 08:00:27:a5:07:7b	
22	1.032228392	PcsCompu_a5:07:7b	PcsCompu_f7:e6:da	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
23	1.042417206	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.2	is at 08:00:27:a5:07:7b	
24	1.042508252	PcsCompu_a5:07:7b	RealtekU_12:35:00	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
25	1.052635721	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.1	is at 08:00:27:a5:07:7b	
26	1.052672580	PcsCompu_a5:07:7b	RealtekU_12:35:00	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
27	2.062987470	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.3	is at 08:00:27:a5:07:7b	
28	2.063017234	PcsCompu_a5:07:7b	PcsCompu_f7:e6:da	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
29	2.073219635	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.2	is at 08:00:27:a5:07:7b	
30	2.073256668	PcsCompu_a5:07:7b	RealtekU_12:35:00	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16
31	2.083434796	PcsCompu_a5:07:7b	PcsCompu_16:6c:3c	ARP	42	10.0.2.1	is at 08:00:27:a5:07:7b	
32	2.083470877	PcsCompu_a5:07:7b	RealtekU_12:35:00	ARP	42	10.0.2.4	is at 08:00:27:a5:07:7b	(duplicate use of 16

Q. I would make my detector to scan for arp responses, to check if my ip address is getting rerouted to another MAC address. I would also raise a flag if my MAC address is redirected to somewhere else.