

- A. 08:00:27:11:cf:53
- B. 10.0.2.15
- C. 08:00:27:1a:45:12
- D. 10.0.2.4

```

$ netstat -r /home/kali
Kernel IP routing table
Destination      Gateway          Genmask          Flags      MSS Window  irtt If
aceercap 0.8.3.1 copyright 2001-2020 Ettercap Development Team
default          10.0.2.1         0.0.0.0          UG          0 0        0 et
h0
10.0.2.0         0.0.0.0          255.255.255.0    U          0 0        0 et
h0

```

E.

```

$ arp -n
Address          HWtype  HWaddress      Flags Mask
Iface
10.0.2.2 ether    52:54:00:12:35:00 C
eth0
10.0.2.1 ether    52:54:00:12:35:00 C
eth0
10.0.2.3 ether    08:00:27:f1:23:27 C
eth0
10.0.2.4 ether    08:00:27:1a:45:12 C
eth0

```

F.

```

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

```

G.

```

msfadmin@metasploitable:~$ arp
Address          HWtype  HWaddress      Flags Mask      Iface
10.0.2.1 ether    08:00:27:11:CF:53 C               eth0
10.0.2.15 ether    08:00:27:11:CF:53 C               eth0

```

H.

- I. 52:54:00:12:35:00, because it corresponds to the gateway of default destination.
- J. I saw http response from the website on metasploitable, but no packet captured on Kali.

K.

- L. Different ip addresses are paired with the same MAC address, indicating that arp poisoning has taken place.

```

msfadmin@metasploitable:~$ arp -n
Address          HWtype  HWaddress      Flags Mask      Iface
10.0.2.2 ether    08:00:27:11:CF:53 C               eth0
10.0.2.15 ether    08:00:27:11:CF:53 C               eth0
10.0.2.1 ether    08:00:27:11:CF:53 C               eth0
10.0.2.3 ether    08:00:27:11:CF:53 C               eth0

```

- M. 08:00:27:11:CF:53. It is the new MAC address associated with the default destination 10.0.2.1.

N.

- O. Yes, I saw HTTP response, and I saw captured packets on Wireshark. I can tell get response is from Kali, and OK response is from the website.
- P. The attacker produced fake responses that changed paired some ip addresses with wrong MAC addresses, sent to Metasploitable, and thus updated its arp cache.
- Q. Let it check if an incoming response contains conflicting ip-MAC addresses pairs with what is in the arp cache. It will generate false positives if an ip address has indeed been associated with a new MAC address.