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Section- 'B'
Branch – CSE AIDS

1. Run nslookup to obtain the IP address of a Web server in Asia. What is the IP address of that server?
2. Run nslookup to determine the authoritative DNS servers for a university in Europe.
3. Run nslookup so that one of the DNS servers obtained in Question 2 is queried for the mail servers for Yahoo! mail. What is its IP address?

```
vishal@vishal-HP-Pavilion-Laptop-15-cs2xxx:~$ nslookup www.aiit.or.kr bitsy.mit.edu
;; communications error to 64:ff9b::1200:4803#53: timed out
;; communications error to 64:ff9b::1200:4803#53: timed out
;; communications error to 64:ff9b::1200:4803#53: timed out
;; communications error to 18.0.72.3#53: timed out
;; no servers could be reached
```

```
vishal@vishal-HP-Pavilion-Laptop-15-cs2xxx:~$ nslookup -type=NS mit.edu
Server:          127.0.0.53
Address:         127.0.0.53#53
```

Non-authoritative answer:

```
mit.edu nameserver = ns1-37.akam.net.
mit.edu nameserver = ns1-173.akam.net.
mit.edu nameserver = asia2.akam.net.
mit.edu nameserver = usw2.akam.net.
mit.edu nameserver = asia1.akam.net.
mit.edu nameserver = use5.akam.net.
mit.edu nameserver = use2.akam.net.
mit.edu nameserver = eur5.akam.net.
```

Authoritative answers can be found from:

```
vishal@vishal-HP-Pavilion-Laptop-15-cs2xxx:~$ nslookup -type=NS mit.edu
Server:          127.0.0.53
Address:         127.0.0.53#53
```

Non-authoritative answer:

```
mit.edu nameserver = ns1-37.akam.net.
mit.edu nameserver = ns1-173.akam.net.
mit.edu nameserver = asia2.akam.net.
mit.edu nameserver = usw2.akam.net.
mit.edu nameserver = asia1.akam.net.
mit.edu nameserver = use5.akam.net.
mit.edu nameserver = use2.akam.net.
mit.edu nameserver = eur5.akam.net.
```

Authoritative answers can be found from:

4. Locate the DNS query and response messages. Are then sent over UDP or TCP?
5. What is the destination port for the DNS query message? What is the source port of DNS response message?
6. To what IP address is the DNS query message sent? Use ipconfig to determine the IP address of your local DNS server. Are these two IP addresses the same?
7. Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?
8. Examine the DNS response message. How many “answers” are provided? What do each of these answers contain?

```

ipmiutil config, cannot open IPMI driver
vishal@vishal-HP-Pavilion-Laptop-15-cs2xxx:~$ wireshark
** (wireshark:5633) 21:10:13.015096 [Capture MESSAGE] -- Capture Start ...
** (wireshark:5633) 21:10:13.069447 [Capture MESSAGE] -- Capture started
** (wireshark:5633) 21:10:13.069509 [Capture MESSAGE] -- File: "/tmp/wireshark_eno1XC2BJ2.pcapng"
** (wireshark:5633) 21:11:15.132006 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:5633) 21:11:15.187073 [Capture MESSAGE] -- Capture stopped.
** (wireshark:5633) 21:13:57.350920 [Capture MESSAGE] -- Capture Start ...
** (wireshark:5633) 21:13:57.404996 [Capture MESSAGE] -- Capture started
** (wireshark:5633) 21:13:57.405027 [Capture MESSAGE] -- File: "/tmp/wireshark_eno1MP8IJ2.pcapng"
** (wireshark:5633) 21:15:18.936729 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:5633) 21:15:19.009031 [Capture MESSAGE] -- Capture stopped.
** (wireshark:5633) 21:15:41.143810 [Capture MESSAGE] -- Capture Start ...
** (wireshark:5633) 21:15:41.181088 [Capture MESSAGE] -- Capture started
** (wireshark:5633) 21:15:41.181143 [Capture MESSAGE] -- File: "/tmp/wireshark_eno1JKDCJ2.pcapng"
** (wireshark:5633) 21:16:34.733413 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:5633) 21:16:34.788950 [Capture MESSAGE] -- Capture stopped.
** (wireshark:5633) 21:16:34.819029 [Capture MESSAGE] -- Capture Start ...
** (wireshark:5633) 21:16:34.856950 [Capture MESSAGE] -- Capture started
** (wireshark:5633) 21:16:34.856988 [Capture MESSAGE] -- File: "/tmp/wireshark_eno1ILSSJ2.pcapng"
** (wireshark:5633) 21:16:36.240800 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:5633) 21:16:36.294763 [Capture MESSAGE] -- Capture stopped.
** (wireshark:5633) 21:16:48.047663 [Capture MESSAGE] -- Capture Start ...
** (wireshark:5633) 21:16:48.113303 [Capture MESSAGE] -- Capture started
** (wireshark:5633) 21:16:48.113349 [Capture MESSAGE] -- File: "/tmp/wireshark_wlo147FBJ2.pcapng"
** (wireshark:5633) 21:16:52.123333 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:5633) 21:16:52.185142 [Capture MESSAGE] -- Capture stopped.
** (wireshark:5633) 21:17:00.410890 [Capture MESSAGE] -- Capture Start ...
** (wireshark:5633) 21:17:00.445228 [Capture MESSAGE] -- Capture started
** (wireshark:5633) 21:17:00.445259 [Capture MESSAGE] -- File: "/tmp/wireshark_wlo1LDHIJ2.pcapng"
** (wireshark:5633) 21:17:02.958836 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:5633) 21:17:03.021947 [Capture MESSAGE] -- Capture stopped.
** (wireshark:5633) 21:18:37.409203 [Capture MESSAGE] -- Capture Start ...
** (wireshark:5633) 21:18:37.463989 [Capture MESSAGE] -- Capture started
** (wireshark:5633) 21:18:37.464032 [Capture MESSAGE] -- File: "/tmp/wireshark_eno1MFYHJ2.pcapng"
** (wireshark:5633) 21:19:11.901972 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:5633) 21:19:11.940991 [Capture MESSAGE] -- Capture stopped.
vishal@vishal-HP-Pavilion-Laptop-15-cs2xxx:~$ ipconfig /displaydns
Command 'ipconfig' not found, did you mean:
  command 'iconfig' from deb ipmiutil (3.1.8-1)
  command 'ifconfig' from deb net-tools (1.60+git20181103.0eebece-1ubuntu5)
  command 'iwconfig' from deb wireless-tools (30~pre9-13.1ubuntu4)
Try: sudo apt install <deb name>
vishal@vishal-HP-Pavilion-Laptop-15-cs2xxx:~$ iconfig \all
ipmiutil config ver 3.18
Cannot map memory.
Cannot open an IPMI driver: /dev/imb, /dev/ipmi0, /dev/ipmi/0,
  or direct driverless.
ipmiutil config, cannot open IPMI driver

```