

HACETTEPE UNIVERSITY
COMPUTER ENGINEERING DEPARTMENT
BBM 453 LAB EXPERIMENT 2



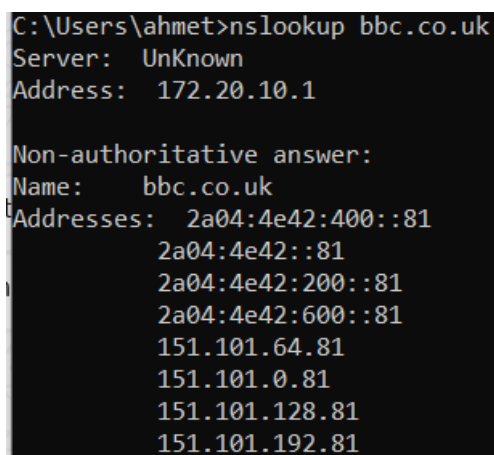
Group No: 41
Yiğit Emir Işıkcı: 2200356028
Ahmet Eren Akbaş: 21945757

Yiğit's IP Address: 10.225.62.14 (Q11-23)

Ahmet's IP Address: 172.20.10.1 (Q1-10)

1) nslookup

Q1) Run nslookup to obtain the IP address of a Web server in Europe. What is the IP address of that server?



```
C:\Users\ahmet>nslookup bbc.co.uk
Server: UnKnown
Address: 172.20.10.1

Non-authoritative answer:
Name:    bbc.co.uk
Addresses: 2a04:4e42:400::81
           2a04:4e42::81
           2a04:4e42:200::81
           2a04:4e42:600::81
           151.101.64.81
           151.101.0.81
           151.101.128.81
           151.101.192.81
```

There are multiple IP addresses that we can use for the web server of bbc.co.uk.

IPv6 Addresses:

2a04:4e42:200::81, 2a04:4e42:600::81, 2a04:4e42::81, 2a04:4e42:400::81

IPv4 Addresses:

151.101.64.81, 151.101.128.81, 151.101.192.81, 151.101.0.81

Q2) Run nslookup to determine the authoritative DNS servers for a university in United States.

```
C:\Users\ahmet>nslookup -type=NS www.asu.edu
Server: UnKnown
Address: 172.20.10.1

Non-authoritative answer:
www.asu.edu canonical name = pantheon-systems.map.fastly.net
fastly.net
    primary name server = ns1.fastly.net
    responsible mail addr = hostmaster.fastly.com
    serial = 2017052201
    refresh = 3600 (1 hour)
    retry = 600 (10 mins)
    expire = 604800 (7 days)
    default TTL = 30 (30 secs)
```

The authoritative DNS server for Arizona State University is **ns1.fastly.net**.

Q3) Run nslookup so that one of the DNS servers of Google is queried for the mail servers for Yahoo! mail. What is its IP address?

```
C:\Users\ahmet>nslookup 8.8.8.8 www.yahoo.com
DNS request timed out.
    timeout was 2 seconds.
Server: UnKnown
Address: 87.248.100.216

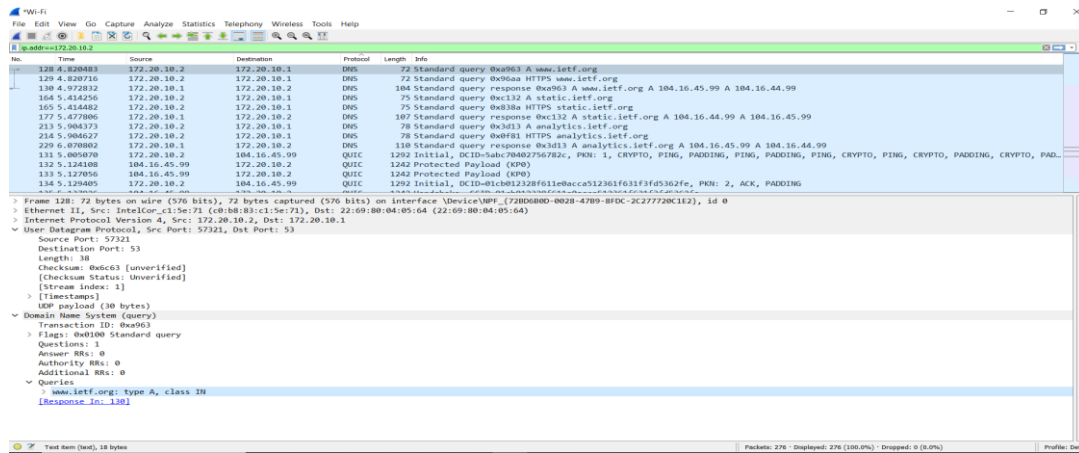
DNS request timed out.
    timeout was 2 seconds.
*** Request to UnKnown timed-out
```

We used 8.8.8.8 as the DNS Server of Google. The IP Address it resolved for Yahoo! is **87.248.100.216**.

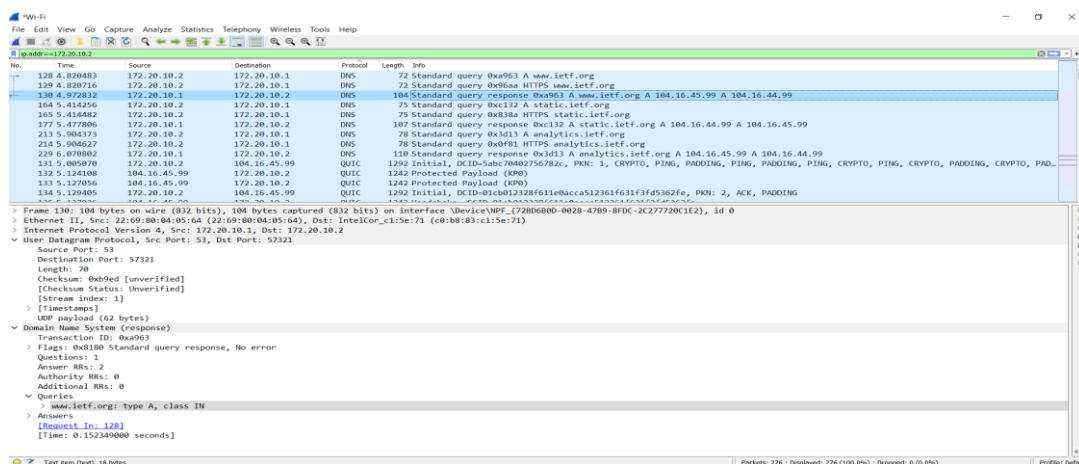
2) ipconfig – Tracing DNS with Wireshark

Q4) Locate the DNS query and response messages. Are they sent over UDP or TCP?

DNS Query:



DNS Response:



They are sent over UDP.

Q5) What is the destination port for the DNS query message? What is the source port of DNS response message?

As we can see from the screenshots in Q4,

Destination port of the DNS query message is **53**.

Source port of the DNS response message is **53**.

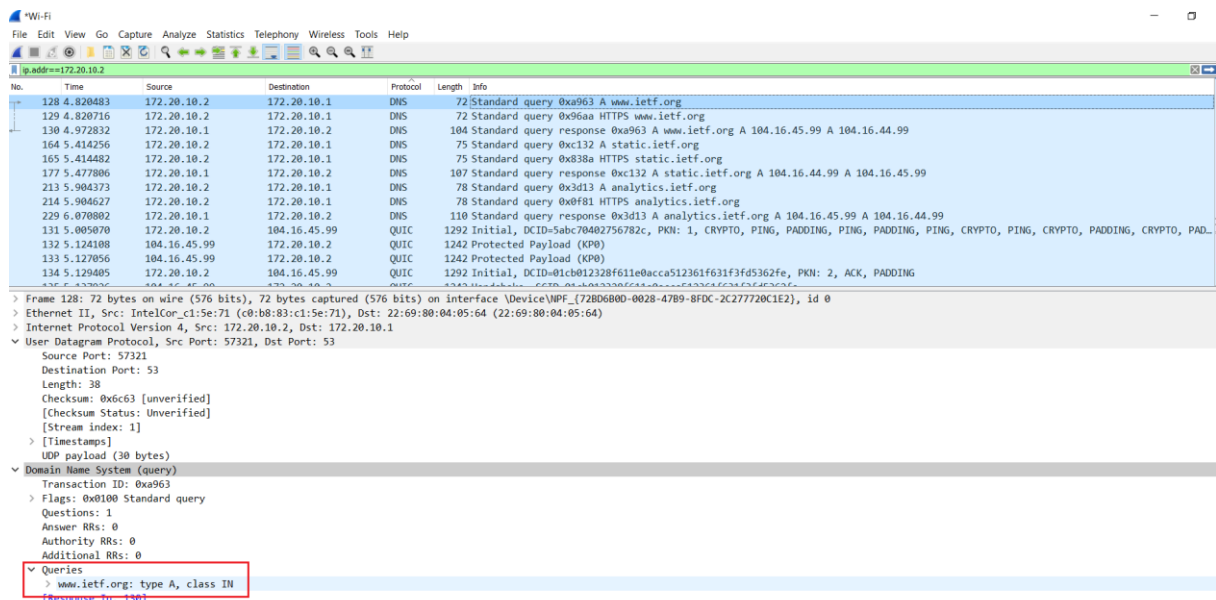
Q6) To what IP address is the DNS query message sent? Use ipconfig to determine the IP address of your local DNS server. Are these two IP addresses the same?

```
Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix . : 
Description . . . . . : Intel(R) Wireless-AC 9560 160MHz
Physical Address. . . . . : C0-B8-83-C1-5E-71
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::5238:da51:1d6a:c4d5%11(Preferred)
IPv4 Address. . . . . : 172.20.10.2(Preferred)
Subnet Mask . . . . . : 255.255.255.240
Lease Obtained. . . . . : 27 Ekim 2023 Cuma 16:59:53
Lease Expires . . . . . : 28 Ekim 2023 Cumartesi 19:26:49
Default Gateway . . . . . : 172.20.10.1
DHCP Server . . . . . : 172.20.10.1
DHCPv6 IAID . . . . . : 213956739
DHCPv6 Client DUID. . . . . : 00-01-00-01-25-B4-D7-59-B0-25-AA-33-EA-D4
DNS Servers . . . . . : 172.20.10.1
NetBIOS over Tcpiip. . . . . : Enabled
```

The DNS Query is sent to **172.20.10.1**. Yes as we can see the ipconfig screenshot that is provided above these two IP addresses are the **same**.

Q7) Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?



It is a type A Standart Query. No, it doesn't contain any answer.

Q8) Examine the DNS response message. How many “answers” are provided? What do each of these answers contain?

There were 2 answers. They contain information about the name of the host, the type of address, class, the TTL, the data length and the IP address.

```

  Answers
  www.ietf.org: type A, class IN, addr 104.16.45.99
    Name: www.ietf.org
    Type: A (Host Address) (1)
    Class: IN (0x0001)
    Time to live: 377 (6 minutes, 17 seconds)
    Data length: 4
    Address: 104.16.45.99
  www.ietf.org: type A, class IN, addr 104.16.44.99
    Name: www.ietf.org
    Type: A (Host Address) (1)
    Class: IN (0x0001)
    Time to live: 377 (6 minutes, 17 seconds)
    Data length: 4
    Address: 104.16.44.99

```

Q9) Consider the subsequent TCP SYN packet sent by your host. Does the destination IP address of the SYN packet correspond to any of the IP addresses provided in the DNS response message?

211 5.889971	172.20.10.2	104.16.44.99	TCP	66 52949 → 443 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
130 4.972832	172.20.10.1	172.20.10.2	DNS	104 Standard query response 0xa963 A www.ietf.org A 104.16.45.99 A 104.16.44.99

Yes, the IP address 104.16.44.99 corresponds to an IP address provided in the DNS response message.

Q10) This web page contains images. Before retrieving each image, does your host issue new DNS queries?

No it doesn't.

Q11) What is the destination port for the DNS query message? What is the source port of DNS response message?

The image shows a Wireshark packet capture of a DNS query and response. The top section shows a list of packets: packet 711 is a DNS Standard query from 10.225.62.14 to 193.140.216.203, and packet 724 is a DNS Standard query response from 193.140.216.203 to 10.225.62.14. The bottom section shows the details of packet 711 (DNS query) and packet 724 (DNS response). In the details of packet 711, the 'Destination Port' is 53. In the details of packet 724, the 'Source Port' is 53. Both ports are highlighted with red boxes.

The destination port of DNS query and the source port of DNS response is 53.

Q12) To what IP address is the DNS query message sent? Is this the IP address of your default local DNS server?

The image shows a Wireshark packet capture of a DNS query and response. The top section shows a list of packets: packet 656 is a DNS Standard query from 10.225.62.14 to 193.140.216.203, and packet 657 is a DNS Standard query response from 193.140.216.203 to 10.225.62.14. The bottom section shows the details of packet 656 (DNS query) and packet 657 (DNS response). In the details of packet 656, the 'Destination' is 193.140.216.203. In the details of packet 657, the 'Source' is 193.140.216.203. Both IP addresses are highlighted with red boxes.

```
C:\Users\Asus>ipconfig /all | grep DNS
DNS Suffi Search List. . . . . : hacettepe.edu.tr
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : hacettepe.edu.tr
DNS Servers . . . . . : 193.140.216.203
Connection-specific DNS Suffix . :
```

DNS query sent to IP address 193.140.216.203. Yes, it is same as my local DNS server.

Q13) Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?

711 4.339122	10.225.62.14	193.140.216.203	DNS	71 Standard query 0x0007 AAAA www.mit.edu
724 4.395284	193.140.216.203	10.225.62.14	DNS	203 Standard query response 0x0007 AAAA www.mit.edu CNAME www.mit.edu.edgekey.net CNAME e9566.dscb.aka...


```

> Frame 711: 71 bytes on wire (568 bits), 71 bytes captured (568 bits) on interface \Device\NPF_{780BF8F8-E96E-41...
> Ethernet II, Src: AzureWav_2c:61:c7 (90:e0:68:2c:61:c7), Dst: 02:e0:52:0a:97:e1 (02:e0:52:0a:97:e1)
> Internet Protocol Version 4, Src: 10.225.62.14, Dst: 193.140.216.203
> User Datagram Protocol, Src Port: 49877, Dst Port: 53
  > Domain Name System (query)
    Transaction ID: 0x0007
    Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
    > Queries
      > www.mit.edu: type AAAA, class IN
        [Response In: 724]
  
```

The type of the DNS query is “AAAA”. But it does not contain any “answers”

Q14) Examine the DNS response message. How many “answers” are provided? What do each of these answers contain?

dns

</

There are four answers provided in the DNS response.

Interpretation

The first two answers are CNAME records, indicating that www.mit.edu does not have a direct A (IPv4) or AAAA (IPv6) record but instead points to another domain name (www.mit.edu.edgekey.net), which in turn points to e9566.dscb.akamaiedge.net.

The last two answers are AAAA records, providing IPv6 addresses for e9566.dscb.akamaiedge.net. This is where the actual content for www.mit.edu is likely hosted.

Q15) Provide a screenshot

We have provided necessary screenshots.

Q16) To what IP address is the DNS query message sent? Is this the IP address of your default local DNS server?

No.	Time	Source	Destination	Protocol	Length	Info
6	1.798473	10.225.62.14	193.140.216.203	DNS	88	Standard query 0x0001 PTR 203.216.140.193.in-addr.arpa
7	1.802950	193.140.216.203	10.225.62.14	DNS	151	Standard query response 0x0001 PTR 203.216.140.193.in-addr.arpa PTR ns01.hacettepe.edu.tr
8	1.804208	10.225.62.14	193.140.216.203	DNS	84	Standard query 0x0002 NS mit.edu.hacettepe.edu.tr
9	1.809541	193.140.216.203	10.225.62.14	DNS	150	Standard query response 0x0002 No such name NS mit.edu.hacettepe.edu.tr SOA ns01.hacettepe.edu.tr
10	1.809939	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0003 NS mit.edu.edu.tr
11	1.963124	193.140.216.203	10.225.62.14	DNS	138	Standard query response 0x0003 No such name NS mit.edu.edu.tr SOA ns42.nic.tr
12	1.963867	10.225.62.14	193.140.216.203	DNS	67	Standard query 0x0004 NS mit.edu
13	2.012976	193.140.216.203	10.225.62.14	DNS	370	Standard query response 0x0004 NS mit.edu NS ns1-173.akam.net NS asia1.akam.net NS ns1-37.akam.net...

```
C:\Users\Asus>ipconfig /all | grep DNS
DNS Suffix Search List. . . . . : hacettepe.edu.tr
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : hacettepe.edu.tr
DNS Servers . . . . . : 193.140.216.203
Connection-specific DNS Suffix . :
```

DNS query message sent to IP address 193.140.216.203 which is same as my default local DNS server.

Q17) Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?

No.	Time	Source	Destination	Protocol	Length	Info
6	1.798473	10.225.62.14	193.140.216.203	DNS	88	Standard query 0x0001 PTR 203.216.140.193.in-addr.arpa
7	1.802950	193.140.216.203	10.225.62.14	DNS	151	Standard query response 0x0001 PTR 203.216.140.193.in-addr.arpa PTR ns01.hacettepe.edu.tr
8	1.804208	10.225.62.14	193.140.216.203	DNS	84	Standard query 0x0002 NS mit.edu.hacettepe.edu.tr
9	1.809541	193.140.216.203	10.225.62.14	DNS	150	Standard query response 0x0002 No such name NS mit.edu.hacettepe.edu.tr SOA ns01.hacettepe.edu.tr
10	1.809939	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0003 NS mit.edu.edu.tr
11	1.963124	193.140.216.203	10.225.62.14	DNS	138	Standard query response 0x0003 No such name NS mit.edu.edu.tr SOA ns42.nic.tr
12	1.963867	10.225.62.14	193.140.216.203	DNS	67	Standard query 0x0004 NS mit.edu
13	2.012976	193.140.216.203	10.225.62.14	DNS	370	Standard query response 0x0004 NS mit.edu NS ns1-173.akam.net NS asia1.akam.net NS ns1-37.akam.net...

> Frame 12: 67 bytes on wire (536 bits), 67 bytes captured (536 bits) on interface \Device\NPF_{7808FAF8-E96E-413-0000-000000000000} interface 0	0000	02 e0 52 0a 97 e1 90 e8	68 2c 61 c7 08 00 45 00	--R--
> Ethernet II, Src: AzureWav_2c:61:c7 (90:e8:68:2c:61:c7), Dst: 02:e0:52:0a:97:e1 (02:e0:52:0a:97:e1)	0010	00 35 0b 34 00 00 00 11	cc 3c 0a e1 3e 0e c1 8c	--S--
> Internet Protocol Version 4, Src: 10.225.62.14, Dst: 193.140.216.203	0020	d8 cb d9 60 00 35 00 21	6a 0e 00 04 01 00 00 01
> User Datagram Protocol, Src Port: 55648, Dst Port: 53	0030	00 00 00 00 00 00 03 6d	69 74 03 65 64 75 00 00
> Domain Name System (query)	0040	02 00 01		...
Transaction ID: 0x0004				
> Flags: 0x0100 Standard query				
Questions: 1				
Answer RRs: 0				
Authority RRs: 0				
Additional RRs: 0				
Queries				
> mit.edu: type NS, class IN				
[Response in 13]				

The type of the DNS query is “NS”. But it does not contain any “Answers”.

Q18) Examine the DNS response message. What MIT name servers does the response message provide? Does this response message also provide the IP addresses of the MIT name servers?

1)Name Servers (NS Records):

ns1-173.akam.net, asia1.akam.net, ns1-37.akam.net, asia2.akam.net, eur5.akam.net, use2.akam.net, use5.akam.net, usw2.akam.net

2)Additional Records (IP Addresses):

2.1)A Records (IPv4 Addresses):

use2.akam.net: 96.7.49.64

ns1-37.akam.net: 193.108.91.37

ns1-173.akam.net: 193.108.91.173

asia1.akam.net: 95.100.175.64

eur5.akam.net: 23.74.25.64

2.2) AAAA Records (IPv6 Addresses):

ns1-37.akam.net: 2600:1401:2::25

use5.akam.net: 2600:1403:a::40

So, yes. Response also provide IP addresses of MIT name servers.

Q19) Provide a screenshot

We have provided necessary screenshots.

Q20) To what IP address is the DNS query message sent? Is this the IP address of your default local DNS server? If not, what does the IP address correspond to?

No.	Time	Source	Destination	Protocol	Length	Info
4	1.208472	10.225.62.14	193.140.216.203	DNS	88	Standard query 0x0001 PTR 203.216.140.193.in-addr.arpa
5	1.211002	193.140.216.203	10.225.62.14	DNS	151	Standard query response 0x0001 PTR 203.216.140.193.in-addr.arpa PTR ns01.hacettepe.edu.tr
6	1.211874	10.225.62.14	193.140.216.203	DNS	91	Standard query 0x0002 A www.aiit.or.kr.hacettepe.edu.tr
7	1.216652	193.140.216.203	10.225.62.14	DNS	157	Standard query response 0x0002 No such name A www.aiit.or.kr.hacettepe.edu.tr SOA ns01.hacettepe.edu.tr
8	1.216989	10.225.62.14	193.140.216.203	DNS	91	Standard query 0x0003 AAAA www.aiit.or.kr.hacettepe.edu.tr
9	1.220145	193.140.216.203	10.225.62.14	DNS	157	Standard query response 0x0003 No such name AAAA www.aiit.or.kr.hacettepe.edu.tr SOA ns01.hacettepe.edu.tr
10	1.220356	10.225.62.14	193.140.216.203	DNS	81	Standard query 0x0004 A www.aiit.or.kr.edu.tr
11	1.222853	193.140.216.203	10.225.62.14	DNS	145	Standard query response 0x0004 No such name A www.aiit.or.kr.edu.tr SOA ns42.nic.tr
12	1.223162	10.225.62.14	193.140.216.203	DNS	81	Standard query 0x0005 AAAA www.aiit.or.kr.edu.tr
13	1.226480	193.140.216.203	10.225.62.14	DNS	145	Standard query response 0x0005 No such name AAAA www.aiit.or.kr.edu.tr SOA ns42.nic.tr
14	1.226825	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0006 A www.aiit.or.kr
15	1.231452	193.140.216.203	10.225.62.14	DNS	90	Standard query response 0x0006 A www.aiit.or.kr A 58.229.6.225
16	1.235586	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0007 AAAA www.aiit.or.kr
17	1.239107	193.140.216.203	10.225.62.14	DNS	128	Standard query response 0x0007 AAAA www.aiit.or.kr SOA ns9.dnszi.com

```
C:\Users\Asus>ipconfig /all | grep DNS
DNS Suffix Search List. . . . . : hacettepe.edu.tr
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : 
Connection-specific DNS Suffix . : hacettepe.edu.tr
DNS Servers . . . . . : 193.140.216.203
Connection-specific DNS Suffix . :
```

DNS query message sent to IP address 193.140.216.203 which is same as my local DNS server again.

Q21) Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?

No.	Time	Source	Destination	Protocol	Length	Info
4	1.208472	10.225.62.14	193.140.216.203	DNS	88	Standard query 0x0001 PTR 203.216.140.193.in-addr.arpa
5	1.211002	193.140.216.203	10.225.62.14	DNS	151	Standard query response 0x0001 PTR 203.216.140.193.in-addr.arpa PTR ns01.hacettepe.edu.tr
6	1.211874	10.225.62.14	193.140.216.203	DNS	91	Standard query 0x0002 A www.aiit.or.kr.hacettepe.edu.tr
7	1.216652	193.140.216.203	10.225.62.14	DNS	157	Standard query response 0x0002 No such name A www.aiit.or.kr.hacettepe.edu.tr SOA ns01.hacettepe.edu.tr
8	1.216989	10.225.62.14	193.140.216.203	DNS	91	Standard query 0x0003 AAAA www.aiit.or.kr.hacettepe.edu.tr
9	1.220145	193.140.216.203	10.225.62.14	DNS	157	Standard query response 0x0003 No such name AAAA www.aiit.or.kr.hacettepe.edu.tr SOA ns01.hacettepe.edu.tr
10	1.220356	10.225.62.14	193.140.216.203	DNS	81	Standard query 0x0004 A www.aiit.or.kr.edu.tr
11	1.222853	193.140.216.203	10.225.62.14	DNS	145	Standard query response 0x0004 No such name A www.aiit.or.kr.edu.tr SOA ns42.nic.tr
12	1.223162	10.225.62.14	193.140.216.203	DNS	81	Standard query 0x0005 AAAA www.aiit.or.kr.edu.tr
13	1.226480	193.140.216.203	10.225.62.14	DNS	145	Standard query response 0x0005 No such name AAAA www.aiit.or.kr.edu.tr SOA ns42.nic.tr
14	1.226825	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0006 A www.aiit.or.kr
15	1.231452	193.140.216.203	10.225.62.14	DNS	90	Standard query response 0x0006 A www.aiit.or.kr A 58.229.6.225
16	1.235586	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0007 AAAA www.aiit.or.kr
17	1.239107	193.140.216.203	10.225.62.14	DNS	128	Standard query response 0x0007 AAAA www.aiit.or.kr SOA ns9.dnszi.com

```
> Frame 14: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface \Device\NPF_{7808FAF8-E96E-413...}
> Ethernet II, Src: AzureWav_2c:61:c7 (90:e8:68:2c:61:c7), Dst: 02:e0:52:0a:97:e1 (02:e0:52:0a:97:e1)
> Internet Protocol Version 4, Src: 10.225.62.14, Dst: 193.140.216.203
> User Datagram Protocol, Src Port: 49277, Dst Port: 53
  > Domain Name System (query)
    Transaction ID: 0x0006
    > Flags: 0x0100 Standard query
    Questions: 1
    Answer RRs: 0
    Authority RRs: 0
    Additional RRs: 0
    > Queries
      > www.aiit.or.kr type A, class IN
      [Response in: 15]
```

The type of the DNS query is “A”. Again, it does not contain answers.

Q22) Examine the DNS response message. How many “answers” are provided? What does each of these answers contain?

No.	Time	Source	Destination	Protocol	Length	Info
4	1.208472	10.225.62.14	193.140.216.203	DNS	88	Standard query 0x0001 PTR 203.216.140.193.in-addr.arpa
5	1.211002	193.140.216.203	10.225.62.14	DNS	151	Standard query response 0x0001 PTR 203.216.140.193.in-addr.arpa PTR ns01.hacettepe.edu.tr
6	1.211874	10.225.62.14	193.140.216.203	DNS	91	Standard query 0x0002 A www.aiit.or.kr.hacettepe.edu.tr
7	1.216652	193.140.216.203	10.225.62.14	DNS	157	Standard query response 0x0002 No such name A www.aiit.or.kr.hacettepe.edu.tr SOA ns01.hacettepe.e...
8	1.216989	10.225.62.14	193.140.216.203	DNS	91	Standard query 0x0003 AAAA www.aiit.or.kr.hacettepe.edu.tr
9	1.220145	193.140.216.203	10.225.62.14	DNS	157	Standard query response 0x0003 No such name AAAA www.aiit.or.kr.hacettepe.edu.tr SOA ns01.hacettep...
10	1.220356	10.225.62.14	193.140.216.203	DNS	81	Standard query 0x0004 A www.aiit.or.kr.edu.tr
11	1.222853	193.140.216.203	10.225.62.14	DNS	145	Standard query response 0x0004 No such name A www.aiit.or.kr.edu.tr SOA ns42.nic.tr
12	1.223162	10.225.62.14	193.140.216.203	DNS	81	Standard query 0x0005 AAAA www.aiit.or.kr.edu.tr
13	1.226480	193.140.216.203	10.225.62.14	DNS	145	Standard query response 0x0005 No such name AAAA www.aiit.or.kr.edu.tr SOA ns42.nic.tr
14	1.226825	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0006 A www.aiit.or.kr
15	1.231452	193.140.216.203	10.225.62.14	DNS	90	Standard query response 0x0006 A www.aiit.or.kr A 58.229.6.225
16	1.235586	10.225.62.14	193.140.216.203	DNS	74	Standard query 0x0007 AAAA www.aiit.or.kr
17	1.239107	193.140.216.203	10.225.62.14	DNS	128	Standard query response 0x0007 AAAA www.aiit.or.kr SOA ns9.dnszi.com

> Frame 15: 90 bytes on wire (720 bits), 90 bytes captured (720 bits) on interface \Device\NPF_{780BFAF8-E96E-4... > Ethernet II, Src: BrocadeC_43:0d:00 (cc:4e:24:43:0d:00), Dst: AzureWav_2c:61:c7 (90:e8:68:2c:61:c7) > Internet Protocol Version 4, Src: 193.140.216.203, Dst: 10.225.62.14 > User Datagram Protocol, Src Port: 53, Dst Port: 49277 > Domain Name System (response) Transaction ID: 0x0006 > Flags: 0x8180 Standard query response, No error Questions: 1 Answer RRs: 1 Authority RRs: 0 Additional RRs: 0 > Queries > www.aiit.or.kr: type A, class IN > Answers > www.aiit.or.kr: type A, class IN, addr 58.229.6.225	<pre> 0000 90 e8 68 2c 61 c7 cc 4e 24 43 0d 00 08 00 45 00 ..h,a 0010 00 4c 98 86 00 00 fd 11 41 d3 c1 8c d8 cb 0a e1 ..L... 0020 3e 0e 00 35 c0 7d 00 38 8a e1 00 06 81 80 00 01 >...5... 0030 00 01 00 00 00 03 77 77 77 04 61 69 69 74 02 0040 6f 72 02 6b 72 00 00 01 00 01 c0 0c 00 01 00 01 or..kn 0050 00 00 0c a6 00 04 3a e5 06 e1 </pre>
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There are 1 answer in DNS response message. It contains the IP address of the www.aiit.or.kr.

Q23) Provide a screenshot

We have provided necessary screenshots.