1.a) How many DNS queries did it take to resolve the domain name?

```
664 10.412348    10.70.119.117    10.70.0.2        DNS    76 Standard query 0xb9cc A ceng.metu.edu.tr
665 10.422207    10.70.0.2        10.70.119.117    DNS    218 Standard query response 0xb9cc A ceng.metu.edu.tr A 144.122.145.146 NS ns04.ceng
667 10.423236    10.70.119.117    10.70.0.2        DNS    76 Standard query 0xe172 A ceng.metu.edu.tr
670 10.427418    10.70.0.2        10.70.119.117    DNS    218 Standard query response 0xe172 A ceng.metu.edu.tr A 144.122.145.146 NS ns03.ceng
671 10.427853    10.70.119.117    10.70.0.2        DNS    76 Standard query 0xd8f8 AAAA ceng.metu.edu.tr
672 10.433784    10.70.0.2        10.70.119.117    DNS    123 Standard query response 0xd8f8 AAAA ceng.metu.edu.tr SOA ns03.ceng.metu.edu.tr
```

Sol: There are three DNS query is enough to resolve the domain name.

1.b) What is the destination IP for the first DNS query?
Sol: 10.70.0.2

1.c) What is the transaction ID for your query(-ies) and its response(s)?

Transaction ID: 0xb9cc Transaction ID: 0xb9cc for first query.

Transaction ID: 0xe172 Transaction ID: 0xe172 for second query.

Transaction ID: 0xd8f8 Transaction ID: 0xd8f8 for third query.

2) What are the Number and Time of the first 5 HTTP request packets sent to server?

Number	348	364	673	677	678
Time	8.367343	8.376760	10.445527	10.452532	10.453281
	348 8.367343	364 8.376760	673 10.445527	677 10.452532	678 10.453281

3) What is your browser's User-Agent string, what languages does it accept on response?

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0

User-Agent string→
Mozille/5.0 , Gecko/20100101 , Firefox/70.0

Accept-Language: tr-TR,tr;q=0.8,en-US;q=0.5,en;q=0.3\
Turkish, English(USA version), English(England version) are accepted on response.

4) Did you send any Cookies with your first GET request to server?
No.

5) How could a request and response packet be matched on a Wireshark environment?

```
348 8.367343    10.70.119.117    193.140.13.80    HTTP    373 GET /success.txt HTTP/1.1
Transmission Control Protocol, Src Port: 61482, Dst Port: 80,
352 8.369543    193.140.13.80    10.70.119.117    HTTP    438 HTTP/1.1 200 OK  (text/plain)
Transmission Control Protocol, Src Port: 80, Dst Port: 61482
```

The owner of request which is client side carries infrormations of source port number and destination port number under part of "Transmission Control Protocol " label. After sending the request to server side, server responses thanks to these informations to client side and this response carries the knowledge of the destinition port number which is the client source and own source port number. So, the source and destination port number informations provides the matching of request and response packets on Wireshark enviroment.

6) How many parrallel connections does your browser use? Explain briefly.
I have used Firefox for my assignment and it uses 6 parrallel connection .I reached this information from Internet. But for Firefox we can access this searching with "about:config " keycode then searching "parallel".

>>Bonus Q→

```
2453 72.063347    192.168.0.19    134.209.173.239    HTTP    463 GET /login.html?username=Palpatine&password=Order66 HTTP/1.1
```

Username: Palpatine   Password: Order66
ceng435{This-is-why-https-is-important}