LAB EXERCISE -3

1. Implement a simple ARP server and client using Python UDP socket programming. Assume ARP server maintains the following records in a file. Make sure that your server can handle multiple clients in iterative manner. Upload this text file along with the source code.

IP Address	MAC Address
10.20.30.40	AB:12:34:2:DE
1.23.34.35	1A:AE:23:56:7F
10.45.67.78	12:45:59:ab:cd:67
21.76.34.56	1:34:7:ef:bc:d2
11.43.45.56	12:23:56:24:ab:e2
10.5.67.234	1:e:34:56:34:32
12.34.62.3	54:e2:f4:d4:fd:e1
23.6.5.98	21:38:23:12:ab:4
11.34.45.67	11:23:45:34:11:2e

Testcase1
Input from client
Client says: 10.5.67.234
Output from server to client
Server says: MAC is 1:e:34:56:34:32

Testcase2
Input from client
Client says: 11.34.45.67
Output from server to client
Server says: MAC is 11:23:45:34:11:2e

Testcase3
nput from client
Client says: 11.22.44.55
Output from server to client
Server says: sorry MAC is not found!!!

2. Implement a simple DNS server and client using Python UDP socket programming. Assume DNS server maintains the following records in a file. Make sure that your server can handle multiple clients in iterative manner. Upload this text file along with the source code.

Domain name	IP Address
www.google.com	10.20.30.40
www.gmail.com	1.23.34.35
www.linkedin.com	10.45.67.78
www.youtube.com	21.76.34.56
www.vit.ac.in	11.43.45.56
www.india.gov.in	10.5.67.234
www.researchgate.in	12.34.62.3
www.yahoo.com	23.6.5.98
www.facebook.com	11.34.45.67

Testcase1
Input from client
Client says: www.vit.ac.in
Output from server to client
Server says: IP is 11.43.45.56

Testcase2
Input from client
Client says: google.com
Output from server to :
Server says: IP is 10.20.30.40

Testcase3
Input from client
Client says: facebook
Output from server to client
Server says: IP is 11.34.45.67

Testcase4
Input from client
Client says: likedin
Output from server to client
Server says: sorry IP is not found!!!