

NETWORK LAB-3

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Slot- L25+L26

1.

Server:

```
import socket
HOST = 'localhost'
PORT = 50007
s = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)
s.bind((HOST, PORT))
f=open("data1.txt","r")
l1=[]
l2=[]
i=0
for line in f:
    for word in line.split():
        if(i%2==0):
            l1.append(word)
        else:
            l2.append(word)
        i+=1
f.close()
while True:
    i=0
    data,address = s.recvfrom(1024)
    for i in range(0,9):
        if data.decode()==l1[i]:
            s.sendto(l2[i].encode(),address)
            break
    if (i==8):
        comment="sorry MAC not found"
        s.sendto(comment.encode(),address)
    elif not data:
        break
    i=0
s.close()
```

client:

```
import socket
HOSTP = ('localhost',50007 )
s = socket.socket(socket.AF_INET,socket.SOCK_DGRAM)

msg=input("Enter the ip address")
while msg!="bye":
    s.sendto(msg.encode(),HOSTP)
```

```

data,address = s.recvfrom(1024)
print('MAC is: '+data.decode())
msg=input("Enter the ip address")
s.close()

```

output:

Testcase1, Testcase2, Testcase3:

server:

```
shivam23@shivam23-HP-EliteBook-840-G1:~/Desktop/netlab$ python3 udp1_lab3_se.py
```

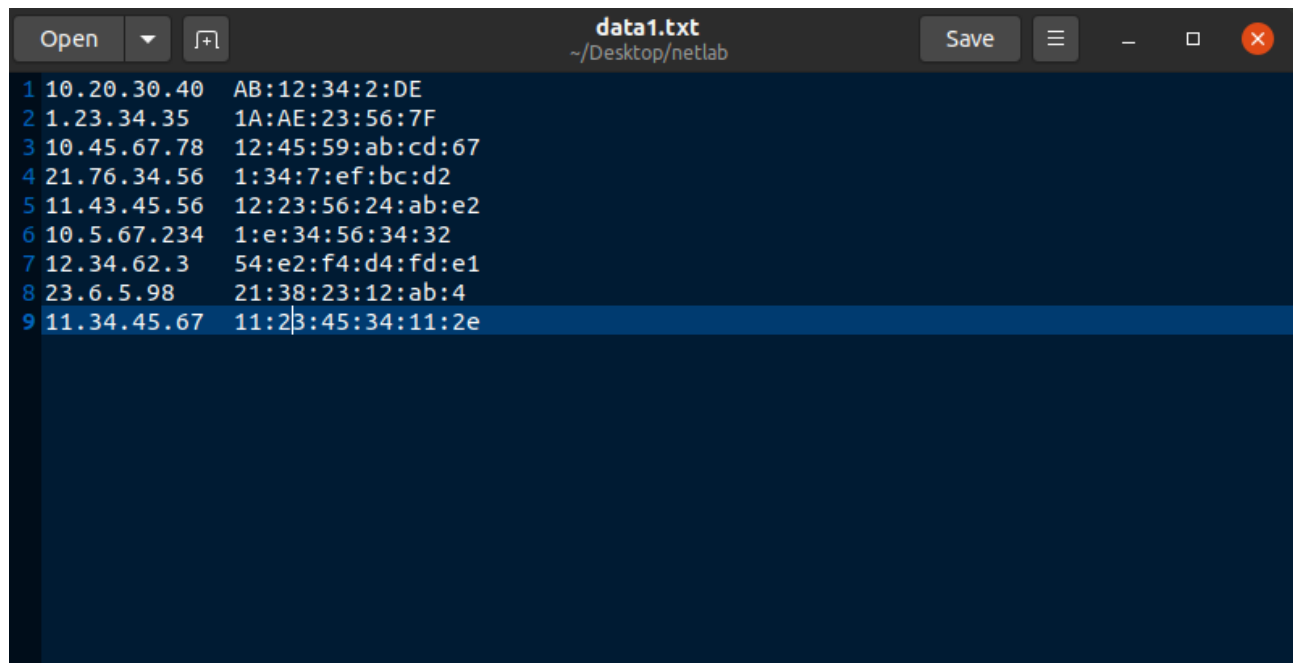
client:

```

shivam23@shivam23-HP-EliteBook-840-G1:~/Desktop/netlab$ python3 udp1_lab3_client.py
Enter the ip address10.5.67.234
MAC is: 1:e:34:56:34:32
Enter the ip address11.34.45.67
MAC is: 11:23:45:34:11:2e
Enter the ip address11.22.44.55
MAC is: sorry MAC not found
Enter the ip addressbye

```

file :



2.

server:

```

import socket
HOST = 'localhost'
PORT = 50007
s = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)
s.bind((HOST, PORT))
f=open("data2.txt","r")

```

```

l1=[]
l2=[]
i=0
for line in f:
    for word in line.split():
        if(i%2==0):
            l1.append(word)
        else:
            l2.append(word)
        i+=1
f.close()
while True:
    i=0
    data,address = s.recvfrom(1024)
    for i in range(0,9):
        if data.decode()==l1[i]:
            s.sendto(l2[i].encode(),address)
            break
    if i==8:
        comment="sorry Domain not found"
        s.sendto(comment.encode(),address)
    elif not data:
        break
    i=0
s.close()

```

client:

```

import socket
HOSTP = ('localhost',50007 )
s = socket.socket(socket.AF_INET,socket.SOCK_DGRAM)

```

```

msg=input("Enter the domain")
while msg!="bye":
    s.sendto(msg.encode(),HOSTP)
    data,address = s.recvfrom(1024)
    print('IP is' + data.decode())
    msg=input("Enter the domain ")
s.close()

```

Output:

Testcase1, Testcase2, Testcase3,Testcase4 :

server:

```

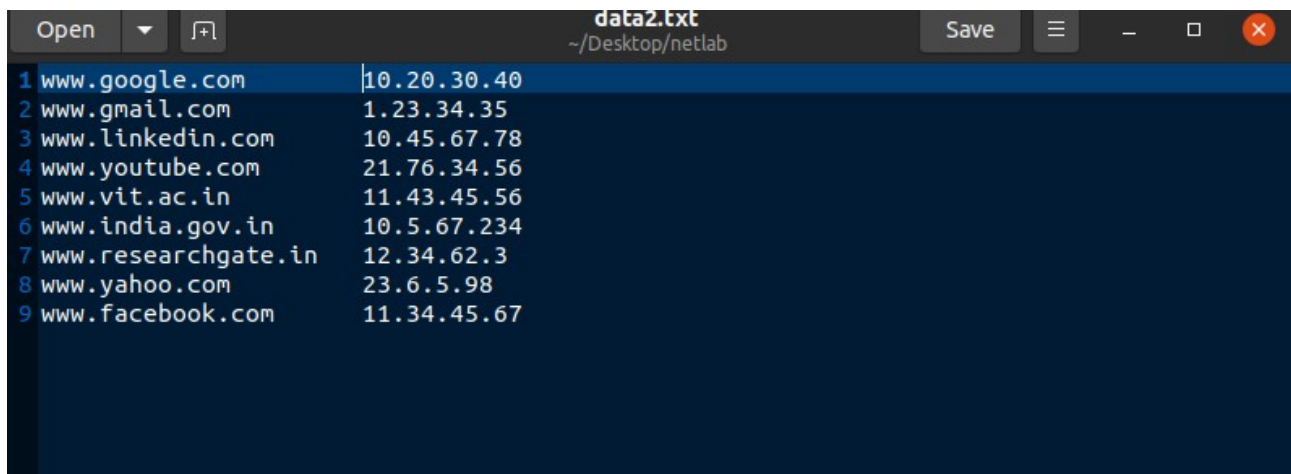
shivam23@shivam23-HP-EliteBook-840-G1:~/Desktop/netlab$ python3 udp2_lab3_server.py

```

client

```
shivam23@shivam23-HP-EliteBook-840-G1:~/Desktop/netlab$ python3 udp2_lab3_client.py
Enter the domainwww.vit.ac.in
IP is11.43.45.56
Enter the domain www.google.com
IP is10.20.30.40
Enter the domain www.facebook.com
IP is11.34.45.67
Enter the domain linkedin
IP issorry Domain not found
Enter the domain bye
```

File :



data2.txt ~/Desktop/netlab	
1	www.google.com 10.20.30.40
2	www.gmail.com 1.23.34.35
3	www.linkedin.com 10.45.67.78
4	www.youtube.com 21.76.34.56
5	www.vit.ac.in 11.43.45.56
6	www.india.gov.in 10.5.67.234
7	www.researchgate.in 12.34.62.3
8	www.yahoo.com 23.6.5.98
9	www.facebook.com 11.34.45.67