

```
python3 dnsserver.py 127.0.0.1 12000
> py dnsserver.py 127.0.0.1 12000
The server is ready to receive on port: 12000

Message Type: 1
Return Code: 0
Message ID: 77
Question Length: 74
Answer Length: 0
Question: host243.student.test A IN
Found Match!

[]
```

Loopback: lo0

udp.port==12000

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	127.0.0.1	127.0.0.1	UDP	118	59935 → 12000 Len=86
			127.0.0.1	UDP	211	12000 → 59935 Len=179

Paul@Pauls-MacBook-Pro: ~/Documents/GitHub/CS-356/Week3

Last login: Wed Sep 30 19:15:19 on ttys000

> cd ~/Documents/GitHub/CS-356/Week3

> py dnsclient.py 127.0.0.1 12000 host243.student.test

Sending Request to 127.0.0.1, 12000:

Message ID: 77

Question Length: 74

Answer Length: 0

Question: host243.student.test A IN

Received Response from: 127.0.0.1, 12000

Return Code: 0 (No Errors)

Message ID: 77

Question Length: 74

Answer Length: 93

Question: host243.student.test A IN

Answer: host243.student.test A IN 3600 192.158.50.13

~/Documents/GitHub/CS-356/Week3 master 12:59:53 AM

>

User Datagram Protocol: Protocol

Packets: 2 · Displayed: 2 (100.0%)

Profile: Default



```
python3 dnsserver.py 127.0.0.1 12000
> py dnsserver.py 127.0.0.1 12000
The server is ready to receive on port: 12000

Message Type: 1
Return Code: 0
Message ID: 77
Question Length: 74
Answer Length: 0
Question: host243.student.test A IN
Found Match!

Message Type: 1
Return Code: 0
Message ID: 94
Question Length: 75
Answer Length: 0
Question: host243.student.test1 A IN
No Match Found!

[]
```

Loopback: lo0

udp.port==12000

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	127.0.0.1	127.0.0.1	UDP	118	59935 → 12000 Len=86
			127.0.0.1	UDP	211	12000 → 59935 Len=179
			127.0.0.1	UDP	119	53190 → 12000 Len=87
			127.0.0.1	UDP	119	12000 → 53190 Len=87

```
paul@Pauls-MacBook-Pro: ~/Documents/GitHub/CS-356/Week3
Received Response from: 127.0.0.1, 12000
Return Code: 0 (No Errors)
Message ID: 77
Question Length: 74
Answer Length: 93
Question: host243.student.test A IN
Answer: host243.student.test A IN 3600 192.158.50.13
> py dnsclient.py 127.0.0.1 12000 host243.student.test1

Sending Request to 127.0.0.1, 12000:
Message ID: 94
Question Length: 75
Answer Length: 0
Question: host243.student.test1 A IN

Received Response from: 127.0.0.1, 12000
Return Code: 1 (Name not found)
Message ID: 94
Question Length: 75
Answer Length: 0
Question: host243.student.test1 A IN

~/Documents/GitHub/CS-356/Week3 master ?1 01:01:05 AM
>
```

```
0000 02 00 00 00 45 00 00 72 c8 39 00 00 40 11 00 00 .....E..r..9..@...
0010 7f 00 00 01 7f 00 00 01 ea 1f 2e e0 00 5e fe 71 .....^..q
0020 00 01 00 00 00 00 00 4a 00 00 00 4d 68 6f 73 74 .....J...Mhost
0030 32 34 33 2e 73 74 75 64 65 6e 74 2e 74 65 73 74 243.stud ent.test
```

```
> py dnsclient.py 127.0.0.1 12000 host243.student.test1
```

Sending Request to 127.0.0.1, 12000:

Message ID: 94

Question Length: 75

Answer Length: 0

Question: host243.student.test1 A IN

Received Response from: 127.0.0.1, 12000

Return Code: 1 (Name not found)

Message ID: 94

Question Length: 75

Answer Length: 0

Question: host243.student.test1 A IN

```
> py dnsclient.py 127.0.0.1 12000 host243.student.test1
```

Request timed out....

Sending Request to 127.0.0.1, 12000

Request timed out....

Sending Request to 127.0.0.1, 12000

Request timed out....

Sending Request to 127.0.0.1, 12000

Request timed out... Exiting Program

🍏 ~/Documents/GitHub/CS-356/Week3 🐱 master ?2 ..... ⌚ 3s ⌚ 01:02:46 AM

```
> █
```