Lab 3

The code for the client is shown in 1, while the output is shown in fig. 1.

Listing 1: Code for UDP pinger client

```
1
2  import time
3  from socket import *
4
5  host = "192.168.1.11"
6  port = 12000
7
8  address = (host, port)
9
10 timeout = 1 # Seconds
11
12 clientSocket = socket(AF_INET, SOCK_DGRAM)
13 clientSocket.settimeout(timeout)
14
15 ptime = 0
16
17 # Ping for 10 times
18 while ptime < 10:
19     ptime += 1
20     data = "Ping " + str(ptime) + " "
21
22     try:
23
24         sentTime = time.time()
25         data += str(sentTime)
26         clientSocket.sendto(data.encode(), address)
27
28         response = clientSocket.recv(1024)
29         receivedTime = time.time()
30
31         roundTripTime = receivedTime - sentTime
32
33         print(response.decode())
34         print(roundTripTime)
35
36     except:
37         print("Request timed out.")
38         continue
39
40 clientSocket.close()
```

```
C:\Users\herma\Documents\KTN\Lab3>python UDPPingerClient.py
PING 1 1550601170.1356716
0.0
PING 2 1550601170.1548219
0.0
Request timed out.
PING 4 1550601171.1656563
0.0007674694061279297
PING 5 1550601171.1726527
0.0010085105895996094
PING 6 1550601171.1767805
0.00107574462890625
PING 7 1550601171.179886
0.0009999275207519531
PING 8 1550601171.1873755
0.0
PING 9 1550601171.1904685
0.0009958744049072266
Request timed out.

C:\Users\herma\Documents\KTN\Lab3>
```

Figure 1: Output from UDP pinger client