

Exp: 13

PING.

Aim: Implement your own PING program

Server.py

```
import socket
def start_server(host='127.0.0.1', with_socket=socket,
                 (socket.AF_INET,
                  socket.SOCK_DGRAM) as s):
    s.bind((host, port))
    print(f"UDP server running on {host}:{port}")
    while True:
        data, addr = s.recvfrom(1024)
        print(f"Received message from {addr}: {data.decode('utf-8')}")
        s.sendto(b'pong', addr)
if __name__ == "__main__":
    start_server()
```

client.py

```
import socket
import time
def ping_server(host='127.0.0.1', port= with
              socket=socket, (socket.AF_INET,
                               socket.SOCK_DGRAM) as s):
    try:
        s.settimeout(2)
        start = time.time()
        s.sendto(b'ping', (host, port))
    except socket.timeout:
```



Print('Request timed out')  
if name == '\_\_main\_\_':  
ping\_server()

Output: python server.py  
UDP Server running on 127.0.0.1:12345  
Received message from ('127.0.0.1', 53000 'ping')  
python client.py  
Received ping from ('127.0.0.1', 12345) in 0.00 Sec.

Q.11

Result: Thus, the ping program is successfully executed & verified.