

EX-N0:13

PING

Date:

Aim:

Implement your own ping program.

Server.py

```
import socket
def start_server(host='127.0.0.1',
                  port=12345):
    with socket.socket(socket.AF_INET,
                      socket.SOCK_DGRAM) as s:
        s.bind((host, port))
        print(f"UDP server running
              on host {host}:{port}")
    while True:
        data, addr = s.recvfrom(1024)
        print(f"Received message from
              address: {addr}")
        data_decode(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=12345):
 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', 53001):
Ping

Python client.py

Received Pong from ('127.0.0.1', 12345) in
~~0.00~~ seconds.

Result: Pong received successfully

Thus the Ping Program is
successfully executed and Verified.