

04/11/24

Experiment - 13

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}:{port}")
```

While True:

```
    data, addr = s.recvfrom(1024)
    print(f"Received message from {addr}")
    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))
            data, addr = s.recvfrom(1024)
            end = time.time()
```

classmate
Date _____
Page _____

```
print(f"Received {data.decode()} from  
Society in {end-start:.2f} seconds")  
except socket.timeout:  
    print("Request timeout").
```

```
if __name__ == "__main__":  
    ping_server()
```

OUTPUT

UDP server running on 127.0.0.1: 12345
Received message from ('127.0.0.1', 541716): Ping

Received Pong from ('127.0.0.1', 12345) in 0.0 seconds

RESULT

Thus the ping program has been
implemented in python.

