

Exp No: 13

Date:

Aim:

To implement "your own" Ping program.

CODE:

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}:
```

```
                  {data.decode()})")
```

```
            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', 53009): Ping
Python Client.py
Received Pong from ('127.0.0.1', 12345) in
0.00 seconds

Result:

Thus the ping program is executed successfully
and the output is verified.