

Ex.No:13

Practical - 13

Date.

Aim:

To Implement your own ping pong 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()
```

17.

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()
```

```
Print (f"Received {data.decode()} from
        {addr} in {end - start : 2f} seconds")
```

```
except socket.timeout:
```

```
Print ("Request timed out")
```

```
if __name__ == "__main__":
```

```
ping_server()
```

O/P:

> python server.py

UDP server running

on 127.0.0.1:12345

> python client.py

Received ping from

('127.0.0.1', 12345)

in 0.00 sec.

Result:

Thus the ping pong is studied and executed
successfully.