

Ex No. 13

Practical - 13

Date : 4/11/24

Aim:

To implement your own ping program.

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 "UDP server received message from
```

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

```
        s.sendto (b 'ping', 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 ping from ('127.0.0.1', 12345) in 0.00 seconds.

Result :

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Thus the ping program is executed successfully & the O/P is verified.