AIM: Implement your own ping program

```
import socket
import time

def ping_server (host: '127.0.0.1', port: 12345):
    with socket.socket (socket.AF_INET, socket.Sock_DRAM) 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()
```

```
import socket

def 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"Server listening on {host}: {port} ")
        while True:
            data, addr = s.recvfrom (1024)
            print (f"Receives message from {addr}: {data.decode ()} ")
```

```
        s.sendto(b'Pong', addr)

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

Output:

Server running on 127.0.0.1: 12345
Received message from ('127.0.0.1', 53162): Ping
Received message from ('127.0.0.1', 53163): Ping
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So on...

Result:

Hence, the ping program was executed successfully