23/10/24. PRACTICAL - 13.

AIM:

Implement your own ping program.

SOURCE 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 time 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', 5309) Ping.
Python client.py
    received Pong from (127.0.0.1, 12345) in
                        0.00 seconds.
```

Result:-

Thus the program is successfully executed and output is verified.