

My Program

Just to implement your own Ping program.

Algorithm

1. Create UDP socket & bind it to specific address & port
2. Wait for message
3. Print message and client's address
4. Send back response to client

UDP client

1. Create UDP socket & set to 2 sec timeout
2. Send Ping to server
3. If a response is received
4. Print response & calculate RTT
5. If no response within 2 sec print request timeout

case

server.py

import socket

host = '127.0.0.1'
port = 12345

s = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)

s.bind((host, port))

while True:

data, addr = s.recvfrom(1024)

print('Received %s from %s' % (data, addr))

s.sendto('pong', addr)

if name == '__main__':

start_server()

client.py

import sys

import socket

def ping(host, port):

s = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)

try:

s.settimeout(2)

start = time.time()

s.sendto('ping', (host, port))

data, addr = s.recvfrom(1024)

end = time.time()

print('Received %s from %s in %s seconds' % (data, addr, end - start))

except socket.timeout:

print('Request timed out')

if name == "__main__":

ping_server()

Output:

Terminal

Terminal

> Py Server.py
UD & Server running

Received message from (127.0.0.1, 50061): ping
12345 in 9.00 seconds

Result:

ping & ping program has
been executed successfully.