

Exp: no:5

Roll no: 241901023

Name: C.Dhanalakshmi

Department: CSE-Cyber Security

CUSTOMIZED PING COMMAND TO TEST SERVER CONNECTIVITY

AIM:

To develop a customized ping command in python server connectivity.

ALGORITHM:

1. Import subprocess, platform and time.

2. Define a function custom-ping(host, count, timeout).

3. Detect the os and set the base ping command with appropriate parameters.

4. Initialize counters for packets sent, received, and a list for RTT values.

5. for each pack:

i) Record start time

ii) Execute ping command

iii) Record end time

iv) If success, calculate RTT, store it, print reply

v) Else, print request time out

6. print summary statistics

7. compute and display min, avg, max matrix

PROGRAM:

```
import socket  
import time  
  
host = "google.com"  
port = 80  
count = 4  
times = []  
  
for i in range(count):  
  
    try:  
        s = socket.socket()  
        start = time.time()  
        s.connect((host, port))  
        end = time.time()  
        s.close()  
        rtt = (end - start) * 1000  
        times.append(rtt)  
        print(f"Reply from {host}: time={rtt:.2f} ms")  
  
    except:  
        print("Request timed out")  
  
if times:  
  
    print("\nMin RTT =", min(times), "ms")  
    print("Max RTT =", max(times), "ms")
```

```
print("Avg RTT =", sum(times) / len(times), "ms")
```

OUTPUT:

```
Microsoft Windows [Version 10.0.26100.1457]
(c) Microsoft Corporation. All rights reserved.

C:\Users\user>cd C:\Users\user\OneDrive\Documents

C:\Users\user\OneDrive\Documents>python ping.py
Reply from google.com: time=168.85 ms
Reply from google.com: time=74.19 ms
Reply from google.com: time=77.56 ms
Reply from google.com: time=98.64 ms

Min RTT = 74.18704032897949 ms
Max RTT = 168.84708404541016 ms
Avg RTT = 104.81005907058716 ms

C:\Users\user\OneDrive\Documents>
```

RESULT:

Therefore customized ping commands was implemented and server connectivity was tested.