

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.