Ex no: 4

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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.

CODE:

```python
import socket, 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:

```
C:\Users\ramyadhivya\OneDrive\Documents>cd C:\Users\ramyadhivya\OneDrive\Documents

C:\Users\ramyadhivya\OneDrive\Documents>python pingg.py
Reply from google.com: time=109.87 ms
Reply from google.com: time=49.20 ms
Reply from google.com: time=49.43 ms
Reply from google.com: time=47.58 ms

Min RTT = 47.58405685424805 ms
Max RTT = 109.86852645874023 ms
Avg RTT = 64.01956081390381 ms

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

RESULT:

Therefore customized ping commands was implemented and

server connectvity was tested.