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CUSTOMIZED PING COMMAND TO TEST SERVER CONNECTIVITY

Aim:

To design a customized ping program that checks the connectivity between a client and a server by sending packets and measuring the response time.

Algorithm:

1. Start the program and input the server IP or hostname.
2. Send a test packet (ICMP or TCP) to the server.
3. Wait for a reply within a specified timeout.
4. If a reply is received, calculate and display the round-trip time (RTT).
5. If no reply is received, display “Request timed out.”
6. Repeat the process for a given number of times.
7. Display summary results (packets sent, received, lost, and average RTT).

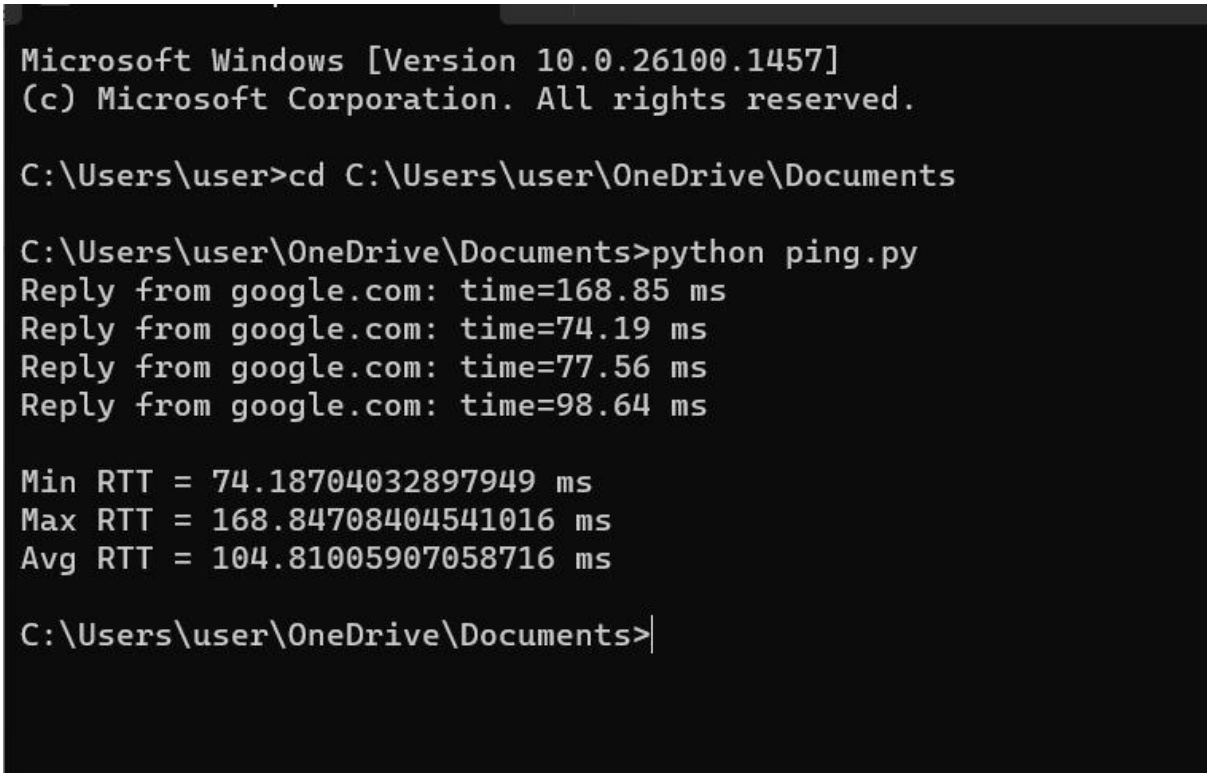
PROGRAM:

```
import socket
import time


host = "google.com"   # you can change
this port = 80            # HTTP port
count = 4            # number of pings
```

```
for i in range(count):
    try:
        s = socket.socket()
        start = time.time()
        s.connect((host, port))
        end = time.time()
        s.close()
        print(f"Reply from {host}: time={(end-start)*1000:.2f}
ms")    except Exception:
        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:



RESULT:

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