EX:10a

DATE:18.9.24

PING TO TEST SERVER CONNECTIVITY

AIM:

To develop ping program to test server connectivity using sockets.

ALGORITHM:

Server.py

1. Import the socket package
2. Initialize local IP address and local port.
3. Create a socket using socket() function
4. Bind the IP address and port number.
5. Accept client request for connection.
6. Print the received connection details
7. Send reply message to the client.
8. Close the connection.

Client.py

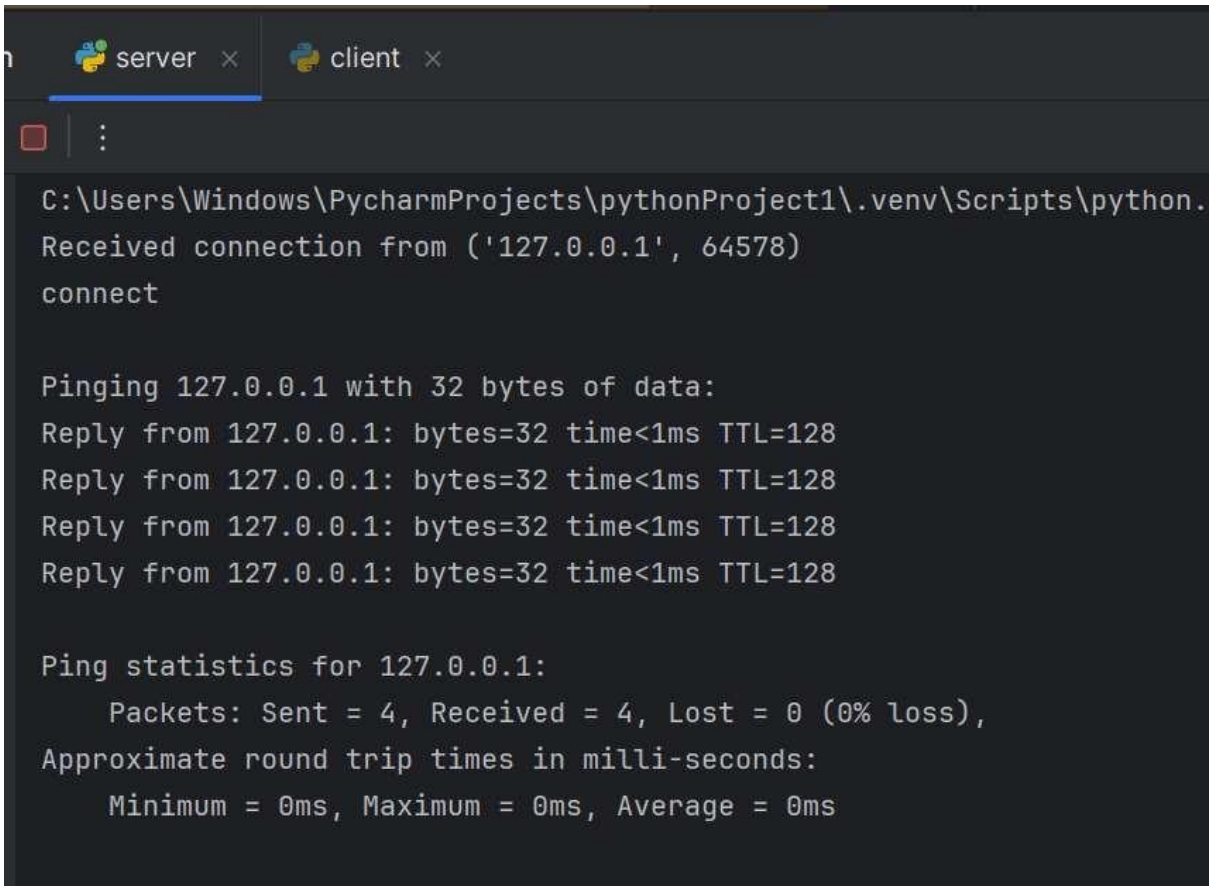
1. Import the socket package
2. Initialize server IP address and local port.
3. Create a socket using socket() function.
4. Start the timer.
5. Send message to the server.
6. The reply message of the server is received.
7. The timer is stopped.
8. Print the round trip time statistics.

Ping to test server connectivity using sockets Server

Code:

```
from socket import * from os import
system s =
socket(AF_INET,SOCK_STREAM)
s.bind(("",8000))
s.listen(5) while
True:
        c,a = s.accept()
        print("Received connection from", a)
data=c.recv(100).decode()      print(data)
        c.send(data.encode('utf-8'))
system("ping "+ a[0])
c.close()
```

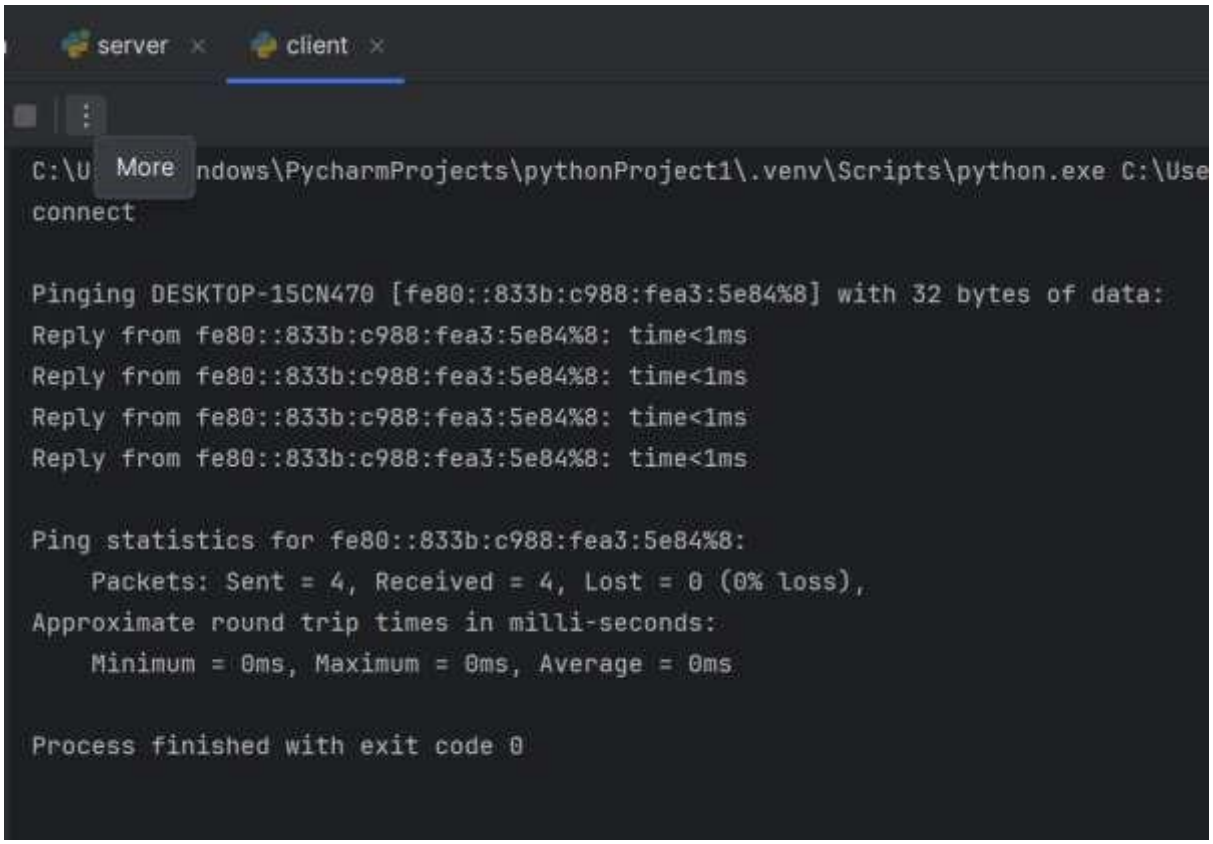
Output:



Client code:

```
from socket import * from
os import system
s = socket(AF_INET, SOCK_STREAM)
s.connect(("127.0.0.1",8000)) # Connect
op='connect'
s.send(op.encode('utf-8')) # Send request
data = s.recv(100).decode()# Get response
print(data)
system("ping "+ gethostname()) s.close()
```

Output:



Result:

Ping program to test server connectivity using sockets is verified.