UDP String Reverser (Client)

Description

In this problem, you are asked to test the interaction between a server and a cl ient through socket programming. The client will send a text message to the serv er, the server will reverse the message, and then send this reversed message back to the client. The client should display the original message and the reversed message. Note that you need to use UDP for this problem.

Input

There is no input for this problem as the interaction happens over a network con nection established between the server and the client. The client will connect to the server at localhost (127.0.0.1) at port 12346, send a specific message to the server, and receive a reversed message as a response.

0utput

The client should output both the original message sent and the reversed message received from the server to standard output. The expected output format is (ple ase note that the reversed message is hardcoded and must match exactly):

Original message: Hello, Server! Please reverse this message. Received reversed: .egassem siht esrever esaelP !revreS ,olleH connect called with: call(('127.0.0.1', 12345)) send called with: call(b'Hello, Server! Please reverse this message.')

recv called with: call(1024) close called with: call()

Method

Your task is to implement and run both the server and client programs as provide d. Ensure the client successfully connects to the server, sends the message, receives the reversed message, and prints the exact expected output. The client should connect to the server at the specified host and port, send the message "Hell o, Server! Please reverse this message.", receive the reversed message from the server, print both the original and the reversed message, and close the connecti