Simple Client/Server secure socket connection

In this homework, you will implement a simple Client/Server secure socket connection. For simplicity:

- The server creates a socket and listens to port 2500.
- The client creates a socket and connects to the server.
- Assume the server and client share a key.
- The client sends a message containing "your name and your ID" encrypted with AES.
- The server receives the message and decrypts it.
- The server prints both the ciphertext and the plaintext.

Programming Requirement

You are required to write this client-server program which communicates via UDP or TCP socket. You are recommended to develop this system using Java (the functionality comes in the package socket). You are free to use Python programming language, as long as your code can perform the same operations mentioned above.

Deliverable materials

Submit the following files:

- 1- Server code
- 2- Client code
- 3- Run file.