Project 2 (Total points: 20)
Due time: November 7th, 2023 11:59pm

The purposes of this project:
- (1) Understanding how to implement the client and server application architecture with UDP sockets
- (2) Understanding how to implement a multithreading server to serve multiple clients simultaneously
- (3) Understanding how to synchronize shared resources among threads

After you submit your project, **please download it and make sure you submit it successfully and correctly**.

Implementing a simple UDP server and UDP clients to fulfill the same function as the project1 with a minor difference.

1. Creating one thread for one datagram message instead of one client/socket connection.

Requirements:

1. Please submit a compressed file which contains your source code and a document. In the document, please include screenshots on how multiple clients interact with your servers. No video is needed.
2. Please make sure your code is executable. You can also provide a simple README on how to run your code.
3. Please comment your source code briefly.
4. Remember to use try and catch to deal with exceptions.
5. You can still work as a team with at most two members and please specify your team members in your document.