

## A. Distributed Systems: Networking activity

Write a Python program using Socket<sup>1</sup> library to simulate a waiting room of a game. Players connect to the server and wait until there are enough players (i.e. 3, 4, or 5). When a new user connects, the server sends a message to the waiting users of the number of players remaining. Once the number of players has been reached, the server starts and communicates a countdown to all connected users. Finally, the server sends a "start" message and the program ends. Implement a gentle shutdown of communication.

## Note:

- Explain with code comment relevant steps (TCP or UDP)
- Choose the way to disconnect the users from the server.

## Deliverable:

- Include this project in a public repository (i.e. GitHub, Bitbucket, etc.)
- Write a Readme file to explain the line commands to test it.

<sup>&</sup>lt;sup>1</sup> https://docs.python.org/es/3/howto/sockets.html