

# Assignment #1 : Socket Programming in Python

- Due : 5/18 24:00
- Project description: Implementation of a simple calculator including  $+$   $-$   $\times$   $\div$  by using socket functions in Python both in TCP and UDP.
  - Client side
    1. implement GUI for a simple calculator
      - ♦ by using *tkinter* which is inherently embedded in Python, or
      - ♦ by installing *PyQt5* or by using Visual Studio
    2. send a query string from the calculator (e.g.,  $2 + 3$ ) to the server
    3. receives the result (e.g., 5) from the server and displays it on the calculator
  - Server side: receives a query string from the client (e.g.,  $2 + 3$ ), parses and calculates it, and sends the result (e.g., 5) back to the client.

Note: You may use the local IP address (127.0.0.1) for a server host within a single (i.e., client) host, if running client and server processes on different hosts is hard to set up.