You are to create a TCP video streaming server. (Not how actual video streaming servers work but they work for this offline). Our server reads a video file frame by frame and sends them to the client. The client receives the raw data, reconstitutes them into video, and plays it. The code for video processing is given. You have to complete the empty functions of the server and client classes. You may write any additional functions you need but should not require so.

1. To launch the server use **server_script.py**
2. To launch the client, use **client_script,py**
3. Change path_to_video_file variable in **server.py** with a path to a video file on your machine.
4. Start with a single-threaded server. Once it is done, make it multithreaded to accept multiple clients.
5. You will require cv2 for this. You can install opencv from [opencv-python · PyPI](#).
6. It is suggested that you create a virtual environment or conda environment.

Create Python virtual environment: [venv — Creation of virtual environments — Python 3.11.1 documentation](#)

Or,

Install Anaconda: [Installation — Anaconda documentation](#)
Create conda environment: [Managing environments — conda 22.11.1.post12+6d9415be6 documentation](#)

Additionally, a file named **offline_env.yml** has been provided. You can use this file to create a conda environment.
How to create conda environment from .yml file: [Export and Create conda environment with yml | by Shan Dou](#)

If you require any help, do not hesitate to contact me.
Email: gourab@cse.uiu.ac.bd