Assignment 4

SUBMIT original code in Python to solve the problem below.

Please be aware that copying and pasting code from any other source other than code you have explicitly written on your own is considered plagiarism. If you receive help, that is fine (document help in the comments of your code) however you need to write your own code, name your own variables, and comment your own code. Students turning in the exact same work as another student will all be given zeros. Plagiarism is not tolerated, and students found to be plagiarizing will be given a zero and reported to the University with the possibility of termination of the class and degree program.

For this assignment you will write two small python programs to implement basic network communications, we'll call them "Program A" and "Program B":

1. Program A will prompt the user to type in a string then transmit that string over a socket to program B. Program A will then listen for a response from program B and print to the console whatever was received.

2. Program B will listen for a string from program A. It will take the received string, convert it to all upper case, and send it back.

Your submission should include two programs. You may hard code the IP address and port number. You may also pick the port number you wish to use. Keep in mind that you will need to identify a port not being used by another application. (Generally, ports greater than 40000 are unused so this is a good place to start).

REMEMBER
- Include the comment heading at the top of your code.
    - # Program Name: Assignment4.py (use the name the program is saved as)
    - # Course: IT3883/Section XXX
    - # Student Name: John Doe
    - # Assignment Number: Lab#
    - # Due Date: xx/xx/ 20XX
    - # Purpose: What does the program do (in a few sentences)?
    - # List Specific resources used to complete the assignment.

- Place comments within your code explaining the programming segments
- Submit the .py file and a screen shot of the output via GitHub.