

In the name of GOD

Applied Computer Networks

Spring 2025

Project 2

Important Notes

- You can use any programming language.
- Copy code from internet and GitHub, GitLab, ... prohibited.
- Project must have report.
- Explain code in report, add screenshot from running project.
- Report must be submitted in typed form. Submitting a photo of the manuscript is not acceptable.
- For each day of delay in submitting, 20% of the exercise grade will be deducted. After 5 days, no grade will be awarded for the exercise.
- If you have any questions about the exercises, you can ask them in the Telegram group.
- If cheating is observed, action will be taken in accordance with educational rules.
- The output of the exercise must be a pdf file, with name ACN-Pro2#-Name-STID.pdf like this one ACN-Pro2-RezaMohammadi-40200123.pdf. Please name the rest of the items same manner and send it along with pdf file.

Part 1. UDP chat program

Write a UDP chat program, that users can send and receive text message.

The program must run on network (2 laptop or PC)

Note:

You must use pure UDP/TCP socket you can't use protocols like HTTP, ... for your programs.

Part 2. TCP chat program

Write a TCP chat program, that users can send and receive text message.

The program must run on network (2 laptop or PC)

Part 3. Send file

Send file with TCP and UDP chat program.

Part 4. Traffic analysis

Analyze network traffic of the chat program with Wireshark and report them.