Computer Network Homework 2 Report

1. How to execute the program?

Command:

Execute 3 python code program by python2. Sender.py must be executed at last.

\$ python2 agent.py

\$ python2 receiver.py

\$ python2 sender.py

Necessary file:

I did not deal with the argument of the program, so the data path is fixed. There should be a file called 'data.txt' in the same path. To read different file, you should modify the program by yourself.

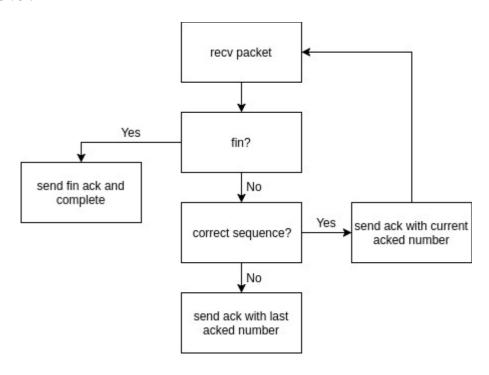
The output file will be 'result.txt' and placed in the same directory.

Argument:

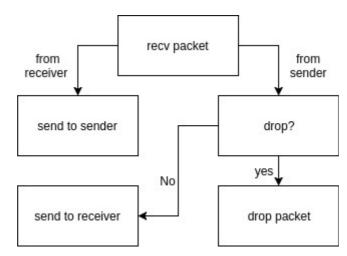
Arguments such as threshold, loss rate, ip, port are all written in the program. To adjust them, you should modify the code.

2. Explain your program structure

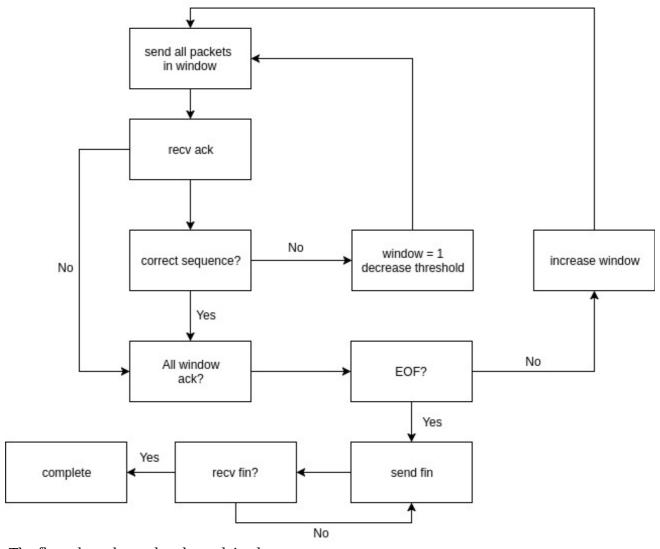
Receiver:



Agent:



Sender:



The flow charts have already explained my program structure.

3. Difficulties and Solutions

Managing packet loss, we use Go Back N. The difficult is that after reading the file to buffer, we can't discard it after we deliver it. Instead, we have to wait until receiving the corresponding ack. The method I use to store the buffer is by creating a buffer list, which is easy and intuitive.