

## Report

### Compilation:

\$make

or

\$make server

\$make agent

\$make receiver

After the compilation, there are 3 executables:

server, agent and receiver.

### Execution:

#### Server(Sender):

server <agent IP> <agent port> <sender port> <path of source file>

example:

./server local 8888 8887 tmp.mpg

#### Agent:

agent <sender IP> <recv IP> <sender port> <agent port> <recv port> <loss\_rate>

example:

./agent local local 8887 8888 8889 0.3

#### Receiver:

receiver <agent IP> <agent port> <receiver port>

After receiver being executed, type command “play” to start video streaming.

example:

./receiver local 8888 8889

\$play

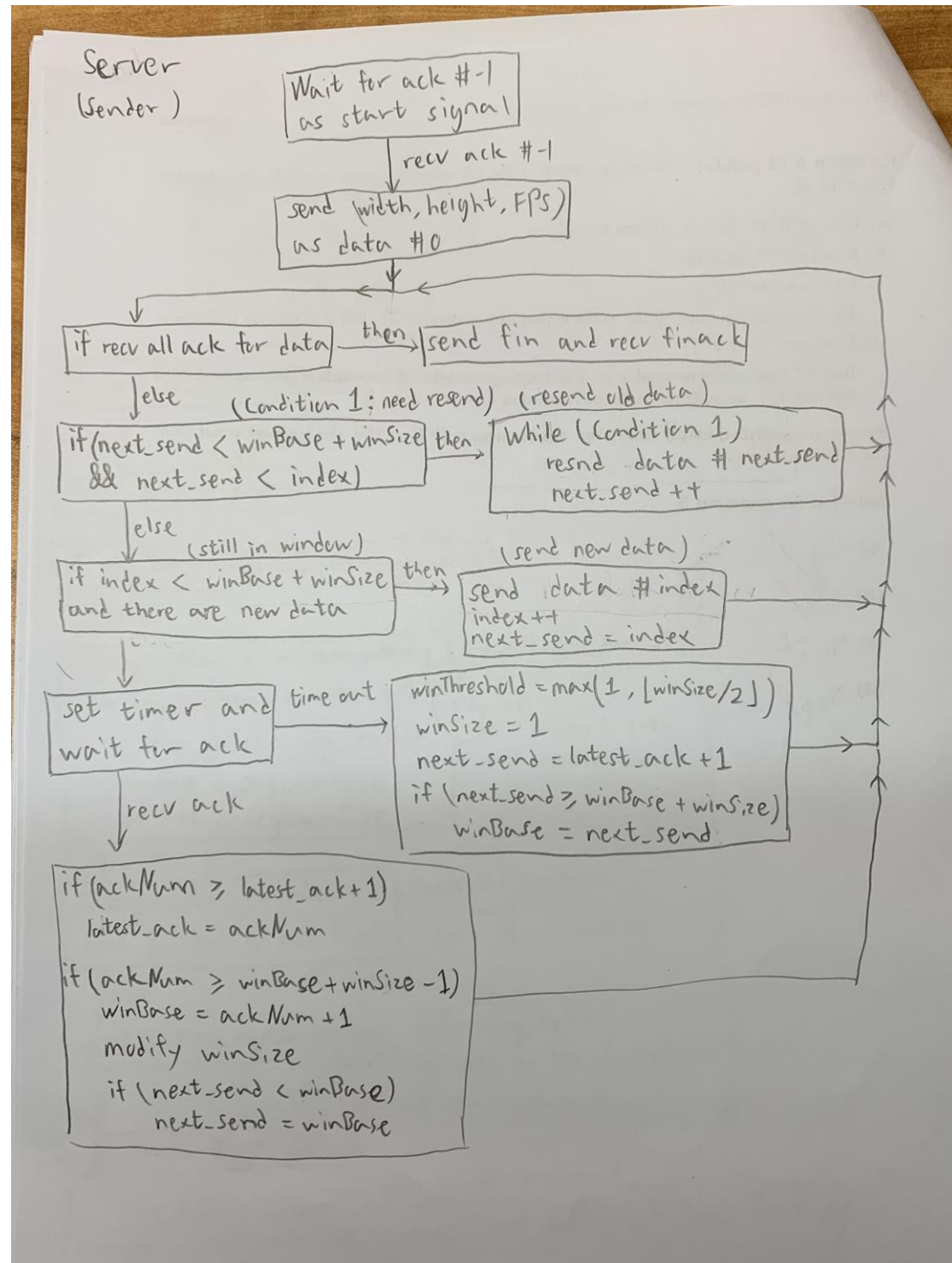
Program structure:

Server(Sender):

index: Next new seqNumber

next\_send: Next seqNumber to be send

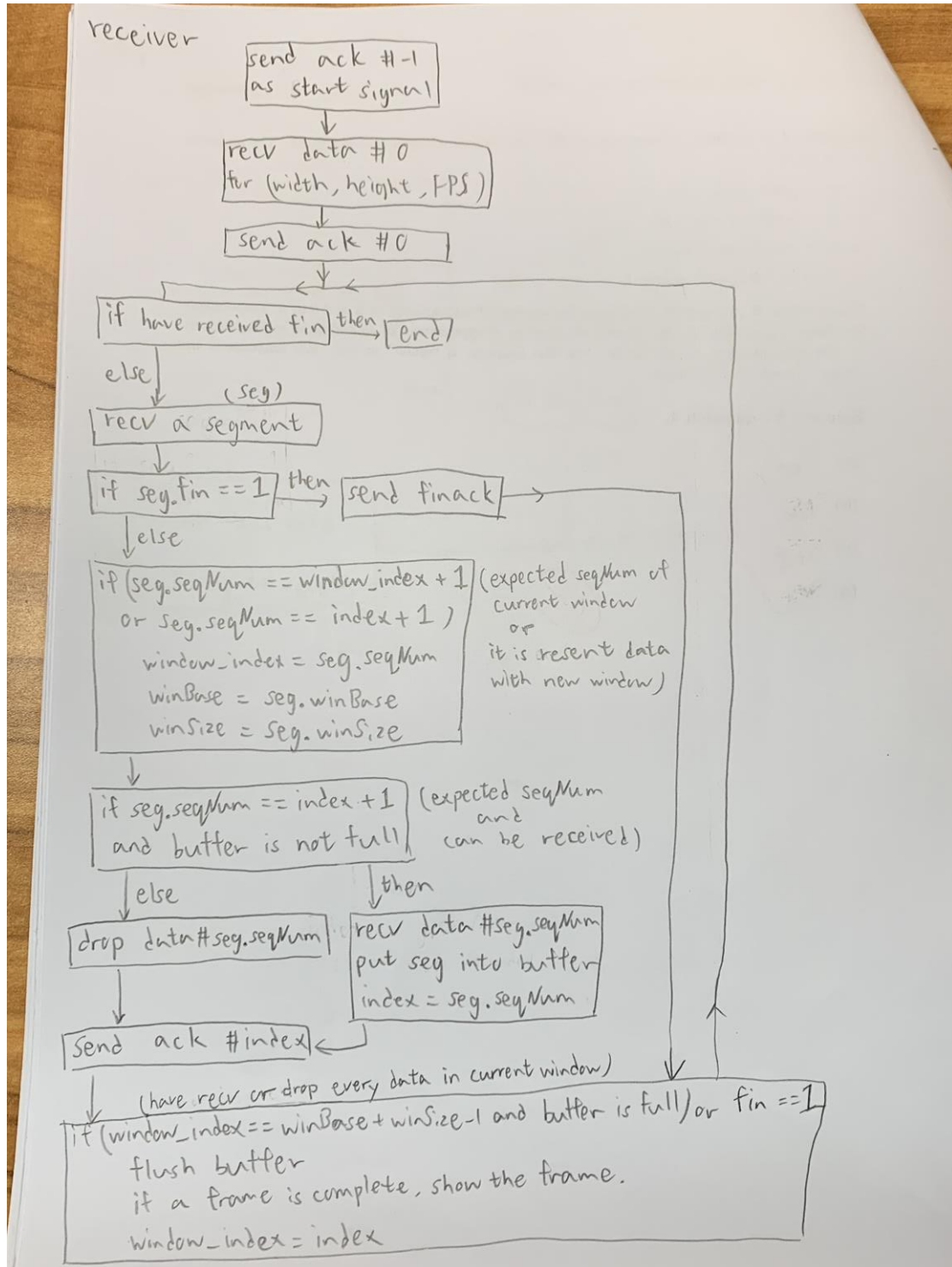
time out is set to 1ms.



Receiver:

index: The latest sent ackNumber

window\_index: When buffer is full, it is the latest seqNumber that should have been acked if buffer is not full. When buffer is not full, it is equal to index. It is used to determine whether all data in the current window have arrived receiver.



Agent:

