

PROJECT 2 - INSTRUCTIONS

Team Members:

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The instructions to run our program are as follows:

1. Downloading the Files:

- a. Download the client.py file from the Client folder and the server.py file from the Server folder.
- b. Also download the Packet.py file as it has been used in the client.py and server.py files.
- c. The Packet.py file has been included as a header in both client.py and server.py.

2. Running the Client from the Terminal:

Python client.py <server IP address> <server port number(7735)> < filename> <window size> <mss>

3. Running the Server from the Terminal:

Python server.py <server port number (7735)> <filename> <p>

4. Binding the Server to the IP Address:

Set self.host = 'Server IP address' in the constructor of class Server in server.py

a. Filename in Client and Server are the file which is transferred and the file which is written respectively.

b. P is the probability that the packet is dropped. The server will generate a random number r in $(0, 1)$. If $r \leq p$, then this received packet is discarded and no other action is taken; otherwise, the packet is accepted and processed according to the Go-back-N rules.

** RUNNING THE 3 TASKS:

To run the tasks, we have written the python script: 'runscript1.py' which will run Server and Client 5 times for every task as criteria given in the project instructions.

The different criteria as mentioned in the write up are the window size N, the packet drop probability p and the MSS value. These 3 values are varied and the script gives the average delay in transferring the file over 5 iterations. Here filename is the name of the file to be transferred.

Testing Window size:

Python runscript1.py <filename> n

Testing Probability:

Python runscript1.py <filename> probability

Testing MSS:

Python runscript1.py <filename> mss

