Napster Style Peer to Peer File Sharing System
CS550 – Advanced Operating System
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Manual:

a. Unzip the project file to a location [($ProjectFolder)]
b. Open 4 terminals and navigate them to [($ProjectFolder)/Code]
c. If python 3.0+ is not installed in the system (to check write *python3* into the terminal), run *make get-dev* in one of the terminal.
d. Now, run **make server**. If terminal prompts "->Server cannot start. Please check port." and exits, open file [($ProjectFolder)/Code/params.py] and change

         serv_port=5015   to   serv_port=<some number between 1000-10000>

e. After that run **make peer_1** , **make peer_2** and **make peer_3** in separate terminals. If any error occurs saying "->Upload server could not start. Exiting." then open file [($ProjectFolder)/Code/params.py] and change the port

    peer_i_port.   To   serv_port=<some number between 1000-10000 not in the params.py file>
    here "i" is 1,2 or 3 according to error generator *make peer_i* .

f. Now assuming everything running smoothly, Server console will show all the events. Peer terminal will prompt the user to enter the file name. All file in shared folder of each connected peer will get sync with the server (only the file name not whole file).
g. User first need to give the file name and then select the peer if any of them have the file.
h. To exit safely, use ctrl+c in all peer terminals and then ctrl+c in server terminal

Note:
1. [($ProjectFolder)/Code/params.py] file contains all the ports and shared directory list, make sure no ports are same.
2. If more client needs to be added then, add more pairs of port and shared directory in params.py and make another copy of any peer_x file (x=1,2 or 3). Make sure to change in peer_x namely,
    shared_dirPath
    portP
    both are available at the top of the file [($ProjectFolder)/Code/peer_x.py]