Manual A Simple Peer to Peer File Sharing System

Step 1: - (Initializing the index server and the three individual servers)

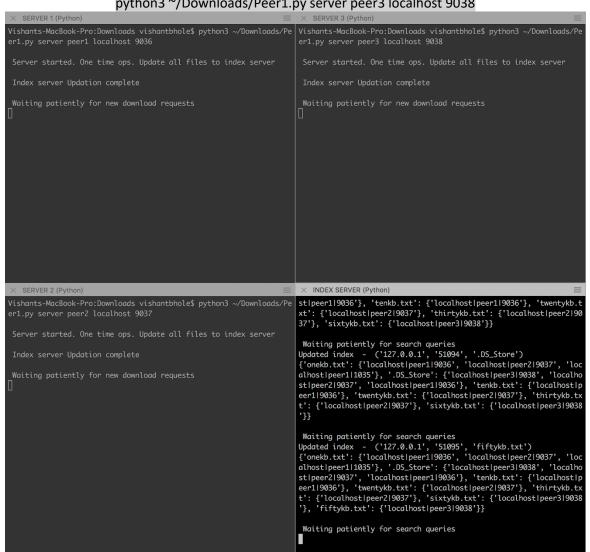
For setting up the index server we need to give the command as given below python3 IndexServer.py

And for the three individual servers we need three different directories on local host and three different port number.

For server 1, we use peer1 as directory and 9036 as the port python3 ~/Downloads/Peer1.py server peer1 localhost 9036

For server 2, we use peer3 as directory and 9037 as the port python3 ~/Downloads/Peer1.py server peer2 localhost 9037

For server 3, we use peer3 as directory and 9038 as the port python3 ~/Downloads/Peer1.py server peer3 localhost 9038



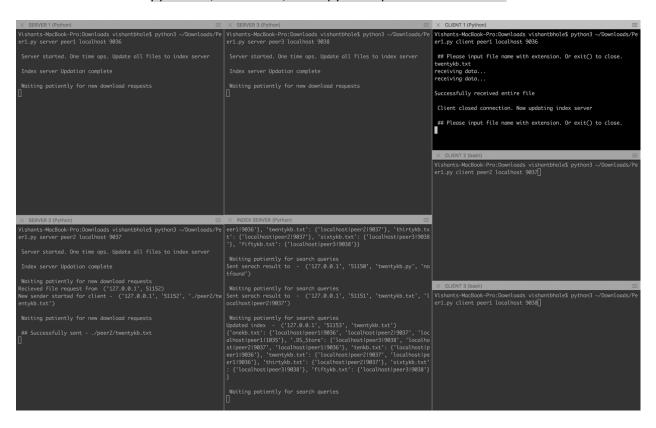
After the following commands we can see the updated IndexServer as shown in the above picture.

Step 2: - (For setting up the clients)

For each server we create a client with the same directory and the same port number we used for the servers, and after every command the index server gets updated which is shown in the respected images below the commands.

Step 3: - (Start first clients)

For every client there are different commands as follows: For client 1, we use peer1 as directory and 9036 as the port python3 ~/Downloads/Peer1.py client peer1 localhost 9036



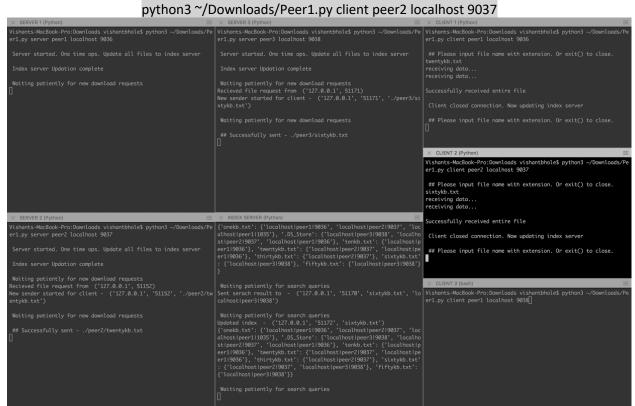
Before update

Waiting patiently for search queries
Updated index - ('127.0.0.1', '51088', 'onekb.txt')
{'onekb.txt': {'localhost|peer1|9036',
 'tenkb.txt': {'localhost|peer1|9036'}}

Searching for twentykb.txt and updated index

Step 4: - (Start second clients)

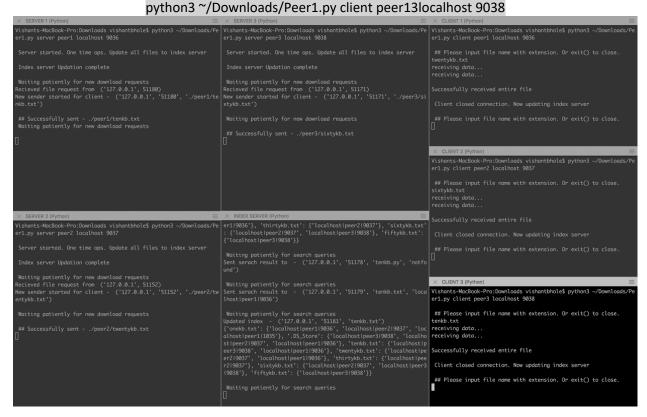
For client 2, we use peer3 as directory and 9037 as the port



Before update

Searching for sixtykb.txt and updated index

For client 3, we use peer3 as directory and 9038 as the port

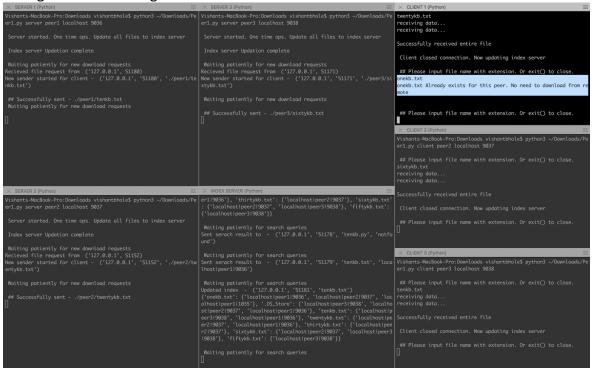


Before update

Searching for tenkb.txt and updated index

Step 6: - (If file is already existing)

If we search for file which already exists in the peer, then it will show error that the file already exists. For example, if we request for file onekb.txt in peer1, then it will show the following error in the image below



Step 7: - (If file not found)

If the file is found nowhere then it will show sorry file cannot be found in any peer. For example, if we search fortykb.txt in the peer 2, it will show the following message as shown in the image below.

