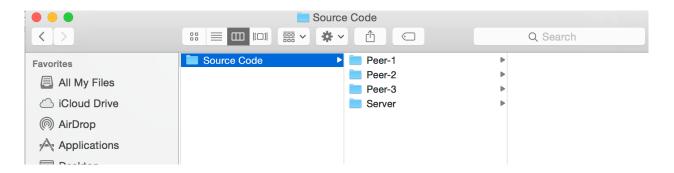
OUTPUT FILE

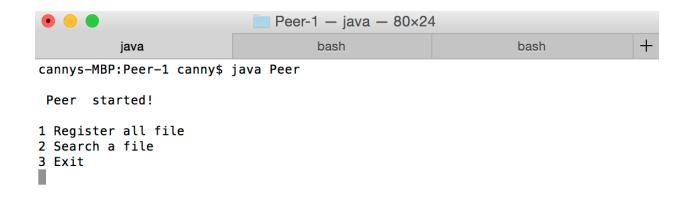
—>In this assignment,we are using 3 client and 1 server.Below is the basic setup for this.



—>When we start server, it look like.



—>when we run peer-1, its show message "Peer started" and 3 option.



—>when we select register all file option, it will register all file to server from local directory named 'Local'.

```
l Register all file
? Search a file
} Exit
ile .DS_Store is Do_registered!
ile 1.txt is Do_registered!
ile 10.txt is Do_registered!
ile 11.txt is Do_registered!
ile 2.txt is Do_registered!
ile 3.txt is Do_registered!
ile 333.txt is Do_registered!
ile 4.txt is Do_registered!
ile 5.txt is Do_registered!
ile 7.txt is Do_registered!
ile 8.txt is Do_registered!
ile 9.txt is Do_registered!
ile 99.txt is Do_registered!
```

—>When user register files on server, server terminal shows info about client ID, port etc..

```
register 192.168.1.71:9010 3.txt
File:3.txt from Client:192.168.1.71:9010 is registried!
hay...New connection accepted!
register 192.168.1.71:9010 333.txt
File:333.txt from Client:192.168.1.71:9010 is registried!
hay...New connection accepted!
register 192.168.1.71:9010 4.txt
hay...New connection accepted!
File:4.txt from Client:192.168.1.71:9010 is registried!
register 192.168.1.71:9010 5.txt
File:5.txt from Client:192.168.1.71:9010 is registried!
hay...New connection accepted!
register 192.168.1.71:9010 7.txt
File:7.txt from Client:192.168.1.71:9010 is registried!
hay...New connection accepted!
register 192.168.1.71:9010 8.txt
File:8.txt from Client:192.168.1.71:9010 is registried!
hay...New connection accepted!
register 192.168.1.71:9010 9.txt
hay...New connection accepted!
File:9.txt from Client:192.168.1.71:9010 is registried!
```

—>If user select search option then it ask for file name and search from index server and shown as below.

```
1 Register all file
2 Search a file
3 Exit
2
Enter the file name:
4.txt
4.txt is found on 192.168.1.71:9110:Look
```

—>when a peer download file it display this. Here we downloading 4.txt file.

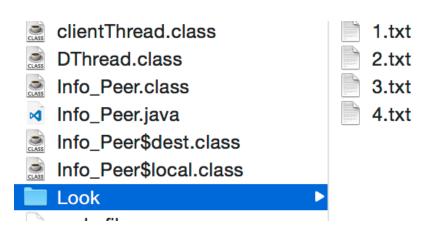
```
1 Register all file
2 Search a file
3 Exit

Start receiving...
display file 4.txt
Finish receive:./Look/4.txt
```

—>From peer where file is downloaded, that peer screen is as below.

```
1 Register all file
2 Search a file
3 Exit
Sent:100.0%
Success
```

->User can find downloaded file in 'Look' folder.



CONCURRENCY CHECK

—> If peer-1 and peer-2 try to download file from peer-3 at a time then screen of peer-1 and peer-2 is as below.

```
Peer-1 - java - 80×24
          java
                                     java
                                                                java
File 2.txt is registered!
File 3.txt is registered!
File 4.txt is registered!
1 Register all file
2 Search a file
3 Exit
Enter the file name:
7.txt
7.txt is found on 192.168.1.71:9210:Look
1 Download the file
2 Cancel and back
1 Register all file
2 Search a file
3 Exit
Start receiving...
display file 7.txt
Finish receive:./Look/7.txt
```

```
Peer-2 - java - 80×24
                               java
                                                    java
File .DS_Store is registered!
File 2.txt is registered!
File 4.txt is registered!
1 Register all file
2 Search a file
3 Exit
Enter the file name:
7.txt
7.txt is found on 192.168.1.71:9210:share
1 Download the file
2 Cancel and back
1 Register all file
2 Search a file
3 Exit
Start receiving...
display file 7.txt
Finish receive:./share/7.txt
—>This screenshot shows a peer-3 terminal from where download
happens.
1 Register all file
2 Search a file
3 Exit
File .DS_Store is registered!
File 1.txt is registered!
File 3.txt is registered!
File 7.txt is registered!
1 Register all file
2 Search a file
3 Exit
Sent:100.0%
Success
Sent:100.0%
Success
```

—> Example of how peerLog and serverLog file looks.

```
peerLog.txt
2017-09-27 12:20:01
                                     File .DS_Store is Do_registered on the index server!
2017-09-27 12:20:01
                                     File 1.txt is Do_registered on the index server!
2017-09-27 12:20:01
                                     File 10.txt is Do_registered on the index server!
2017-09-27 12:20:01
                                    File 2.txt is Do_registered on the index server!
2017-09-27 12:20:01
2017-09-27 12:20:01
                                    File 3.txt is Do_registered on the index server! File 4.txt is Do_registered on the index server!
2017-09-27 12:20:01
                                    File 5.txt is Do_registered on the index server!
2017-09-27 12:20:01
                                    File 7.txt is Do_registered on the index server!
2017-09-27 12:20:01
                                    File 8.txt is Do_registered on the index server!
2017-09-27 12:20:01
2017-09-27 12:21:38
                                    File 9.txt is Do_registered on the index server!
                                    File .DS_Store is Do_registered on the index server!
2017-09-27 12:21:38
                                    File 1.txt is Do_registered on the index server!
2017-09-27 12:21:38
                                    File 10.txt is Do_registered on the index server!
2017-09-27 12:21:38
                                    File 2.txt is Do_registered on the index server!
2017-09-27 12:21:38
                                    File 3.txt is Do_registered on the index server!
2017-09-27 12:21:38
2017-09-27 12:21:38
                                    File 4.txt is Do_registered on the index server! File 5.txt is Do_registered on the index server!
                                    File 7.txt is Do_registered on the index server!
2017-09-27 12:21:38
2017-09-27 12:21:38
                                    File 8.txt is Do_registered on the index server!
2017-09-27 12:21:38
                                    File 9.txt is Do_registered on the index server!
                                    File 20.txt is found on 104.194.123.44!
2017-09-27 12:21:44
2017-09-27 12:22:11
2017-09-27 12:26:16
                                    File w is not found!
                                    File .DS_Store is Do_registered on the index server!
2017-09-27 12:26:16
                                   File 1.txt is Do_registered on the index server!
2017-09-27 12:26:16
                                   File 10.txt is Do_registered on the index server!
2017-09-27 12:26:16
                                   File 2.txt is Do_registered on the index server!
                                   File 20.txt is Do_registered on the index server!
File 3.txt is Do_registered on the index server!
File 4.txt is Do_registered on the index server!
2017-09-27 12:26:16
2017-09-27 12:26:16
2017-09-27 12:26:16
2017-09-27 12:26:16
                                   File 5.txt is Do_registered on the index server!
```

```
serverLog.txt
2017-09-27 12:20:01
                                  File 3.txt is registered on the index server!
2017-09-27 12:20:01
                                  File 5.txt is registered on the index server!
2017-09-27 12:20:01
                                  File 9.txt is registered on the index server!
                                  File 1.txt is registered on the index server!
2017-09-27 12:20:01
2017-09-27 12:20:01
2017-09-27 12:20:01
                                  File .DS_Store is registered on the index server! File 7.txt is registered on the index server!
2017-09-27 12:20:01
                                  File 8.txt is registered on the index server!
2017-09-27 12:20:01
                                  File 10.txt is registered on the index server!
                                  File 4.txt is registered on the index server!
2017-09-27 12:20:01
2017-09-27 12:20:01
2017-09-27 12:21:05
                                  File 2.txt is registered on the index server!
                                  File .DS_Store is registered on the index server!
2017-09-27 12:21:05
                                  File 11.txt is registered on the index server!
2017-09-27 12:21:05
                                  File 12.txt is registered on the index server!
2017-09-27 12:21:05
                                  File 13.txt is registered on the index server!
2017-09-27 12:21:05
2017-09-27 12:21:05
                                  File 14.txt is registered on the index server!
                                  File 15.txt is registered on the index server!
2017-09-27 12:21:05
                                  File 16.txt is registered on the index server!
2017-09-27 12:21:05
                                  File 17.txt is registered on the index server!
2017-09-27 12:21:05
                                  File 18.txt is registered on the index server!
2017-09-27 12:21:05
                                  File 19.txt is registered on the index server!
2017-09-27 12:21:05
2017-09-27 12:26:16
                                  File 20.txt is registered on the index server!
                                  File 9.txt is registered on the index server!
2017-09-27 12:26:16
                                 File 2.txt is registered on the index server!
2017-09-27 12:26:16
                                 File .DS_Store is registered on the index server!
2017-09-27 12:26:16
                                 File 5.txt is registered on the index server!
2017-09-27 12:26:16
2017-09-27 12:26:16
                                  File 10.txt is registered on the index server!
                                  File 1.txt is registered on the index server!
2017-09-27 12:26:16
                                  File 20.txt is registered on the index server!
2017-09-27 12:26:16
                                  File 8.txt is registered on the index server!
2017-09-27 12:26:16
                                  File 3.txt is registered on the index server!
```