

# Test cases

All the test cases were run on AWS EC2 instances.

**Test Case 1: Register\_in\_client\_Side, Client name : Client1, Client port: 11111,** Register all the files in Client1.

```
ubuntu@ip-172-31-46-19:~/Assign1/Client1$ make
javac *.java
java Client 11111 client1 35.164.243.127 45678
Task scheduled.
```

```
Client listening on 11111
```

1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit

```
1
```

```
***** Register *****
```

```
Send Object
```

```
File F_100mb.txt
```

```
File sam.sh
```

```
File F_100kb.txt
```

```
File F_1gb.txt
```

```
File F_1kb.txt
```

```
File F_1mb.txt
```

```
File F_10kb.txt
```

```
File F_10mb.txt
```

```
Successfully Registered!
```

**Test Case 2: Unregister\_client\_side**, Client name : Client1, Client port: 11111, Unregister all the files in Client1.


```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
4
***** UnRegister *****
Unregistered Successfully
```

**Test Case 3: get\_All\_files\_listed in server**, Client name : Client1, Client port: 11111, get all files listed in server in Client1.

Command Prompt - java Client 11115 client\_window 35.164.243.127 45678

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
2
***** Request All File *****
List of all files :-
1. c_declarations.txt
2. F_10kb.txt
3. sam.sh
4. BINDPLN.TXT
5. Request.java
6. F_1gb.txt
7. CUSTOMER.TXT
8. F_100kb.txt
9. BINDPKG.TXT
10. F_100mb.txt
11. a.txt
12. developer-read-me.txt
13. clientResponseThread.java
14. Response.java
15. data (1).txt
16. F_1mb.txt
17. c_declarations_ans.txt
18. 14-svms.txt
19. CUSTINQ.TXT
20. calendar.txt
21. clientRequestThread.java
22. changelog.txt
23. AUTHORS.txt
24. F_10mb.txt
25. F_1kb.txt
26. RequestType.java
```

**Test Case 5: File\_1kb\_localhost:** On local host, **File name:** F\_1kb.txt, **File size:** 1 KB, **Client name:** Client1, **Client port:** 11111, accessing file F\_1kb.txt from server and downloading from client.



```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_1kb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 4

Downloaded file :F_1kb.txt File size : 1.01KB

Performance speed 0.21MB/sec
-----
```

**Test Case 6: File\_1kb\_peer\_to\_peer:** On AWS instances, **File name:** F\_1kb.txt, **File size:** 1 KB, **Client name:** Client1, **Client port:** 11111, accessing file F\_1kb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_1kb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 6

Downloaded file :F_1kb.txt File size : 1.01KB

Performance speed 0.16MB/sec
-----
```

**Test Case 7: File\_10kb\_local-host :** On local-host, **File name:** F\_10kb.txt, **File size:** 10 KB, **Client name:** Client1, **Client port:** 11111, accessing file F\_10kb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****
```

```
Enter File name :- F_10kb.txt
PeerList Received
```

```
All Peer List :-1
1. client1
```

```
Please Enter Client NO. to connect and download file :- 1
sending request to peer
request sent
```

```
-----
Transfer Time in milliseconds: 6
```

```
Downloaded file :F_10kb.txt File size : 10.08KB
```

```
Performance speed 1.49MB/sec
-----
```

**Test Case 8: File\_10kb\_peer\_to\_peer :** On AWS instances, **File name:** F\_10kb.txt, **File size:** 10 KB, **Client name:** Client1, **Client port:** 11111, accessing file F\_10kb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_10kb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 6

Downloaded file :F_10kb.txt File size : 10.08KB

Performance speed 1.51MB/sec
-----
```

**Test Case 9: File\_1mb\_localhost** : On localhost, **File name:** F\_1mb.txt, **File size:** 1 MB, **Client name:** Client1, **Client port:** 11111, accessing file F\_1mb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_1mb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 15
Downloaded file :F_1mb.txt File size : 1,007.81KB
Performance speed 65.18MB/sec
-----
```

**Test Case 10: File\_1mb\_peer\_to\_peer** : On AWS instances, **File name:** F\_1mb.txt, **File size:** 1 MB, **Client name:** Client1, **Client port:** 11111, accessing file F\_1mb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_1mb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 23

Downloaded file :F_1mb.txt File size : 1,007.81KB

Performance speed 41.02MB/sec
-----
```



**Test Case 11: File\_100kb\_localhost :** On local-host, **File name:** F\_100kb.txt, **File size:** 100 KB, **Client name:** Client1, **Client port:** 11111, accessing file F\_100kb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_100kb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 8

Downloaded file :F_100kb.txt File size : 100.78KB

Performance speed 11.26MB/sec
-----
```

**Test Case 12: File\_100kb\_peer\_to\_peer :** On AWS instances, **File name:** F\_100kb.txt, **File size:** 100 KB, **Client name:** Client1, **Client port:** 11111, accessing file F\_100kb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_100kb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 14

Downloaded file :F_100kb.txt File size : 100.78KB

Performance speed 6.83MB/sec
-----
```

**Test Case 13:File\_10mb\_localhost** : On localhost, **File name:** F\_10mb.txt, **File size:** 10 MB, **Client name:** Client1, **Client port:** 11111, accessing file F\_10mb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_10mb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 82

Downloaded file :F_10mb.txt File size : 9.84MB

Performance speed 119.43MB/sec
-----
```

**Test Case 14:File\_10mb\_peer\_to\_peer** : On AWS instances, **File name:** F\_10mb.txt, **File size:** 10 MB, **Client name:** Client1, **Client port:** 11111, accessing file F\_10mb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_10mb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 100

Downloaded file :F_10mb.txt File size : 9.84MB

Performance speed 98.22MB/sec
-----
```

**Test Case 15:File\_100mb\_localhost** : On local-host, **File name:** F\_100mb.txt, **File size:** 100 MB, **Client name:** Client1, **Client port:** 11111, accessing file F\_100mb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_100mb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 765

Downloaded file :F_100mb.txt File size : 98.42MB

Performance speed 128.63MB/sec
-----
```

**Test Case 16:File\_100mb\_peer\_to\_peer** : On AWS instances, **File name:** F\_100mb.txt, **File size:** 100 MB, **Client name:** Client1, **Client port:** 11111, accessing file F\_100mb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_100mb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 860

Downloaded file :F_100mb.txt File size : 98.42MB

Performance speed 114.36MB/sec
-----
```

**Test Case 17:File\_1gb\_localhost** : On local-host, **File name:** F\_1gb.txt, **File size:** 1 GB, **Client name:** Client1, **Client port:** 11111, accessing file F\_1gb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_1gb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 13332

Downloaded file :F_1gb.txt File size : 984.19MB

Performance speed 73.82MB/sec
-----
```

**Test Case 18:File\_1gb\_peer\_to\_peer** : On AWS Instances, **File name:** F\_1gb.txt, **File size:** 1 GB, **Client name:** Client1, **Client port:** 11111, accessing file F\_1gb.txt from server and downloading from client.

```
1. Register
2. Get All file list
3. Lookup File & Download
4. Unregister
5. Exit
3
*****      Lookup for file      *****

Enter File name :- F_1gb.txt
PeerList Received

All Peer List :-1
1. client1

Please Enter Client No. to connect and download file :- 1
sending request to peer
request sent
-----
Transfer Time in milliseconds: 14760

Downloaded file :F_1gb.txt File size : 984.19MB

Performance speed 66.68MB/sec
-----
```



## 18. Server\_Side

```
ubuntu@ip-172-31-46-19:~/Assign1/Server$ make
javac *.java
java Server 45678
Server listening on 45678
Host :- client2 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Successfully Registered!
Host :- null IP:null Port:0 File Request :F_1kb.txt
Name :-F_1kb.txt
1
Host :- client2 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Unregistered Successfully
Host :- client2 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Successfully Registered!
Host :- null IP:null Port:0 File Request :F_1kb.txt
Name :-F_1kb.txt
1
Host :- null IP:null Port:0 File Request :F_10kb.txt
Name :-F_10kb.txt
1
Host :- client2 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Unregistered Successfully
Host :- client2 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Successfully Registered!
Host :- null IP:null Port:0 File Request :F_1kb.txt
Name :-F_1kb.txt
1
Host :- null IP:null Port:0 File Request :F_10kb.txt
Name :-F_10kb.txt
1
Host :- client1 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Unregistered Successfully
Host :- client1 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Successfully Registered!
Host :- client1 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Unregistered Successfully
Host :- client1 IP:ip-172-31-46-19/172.31.46.19 Port:11111 Successfully Registered!
```