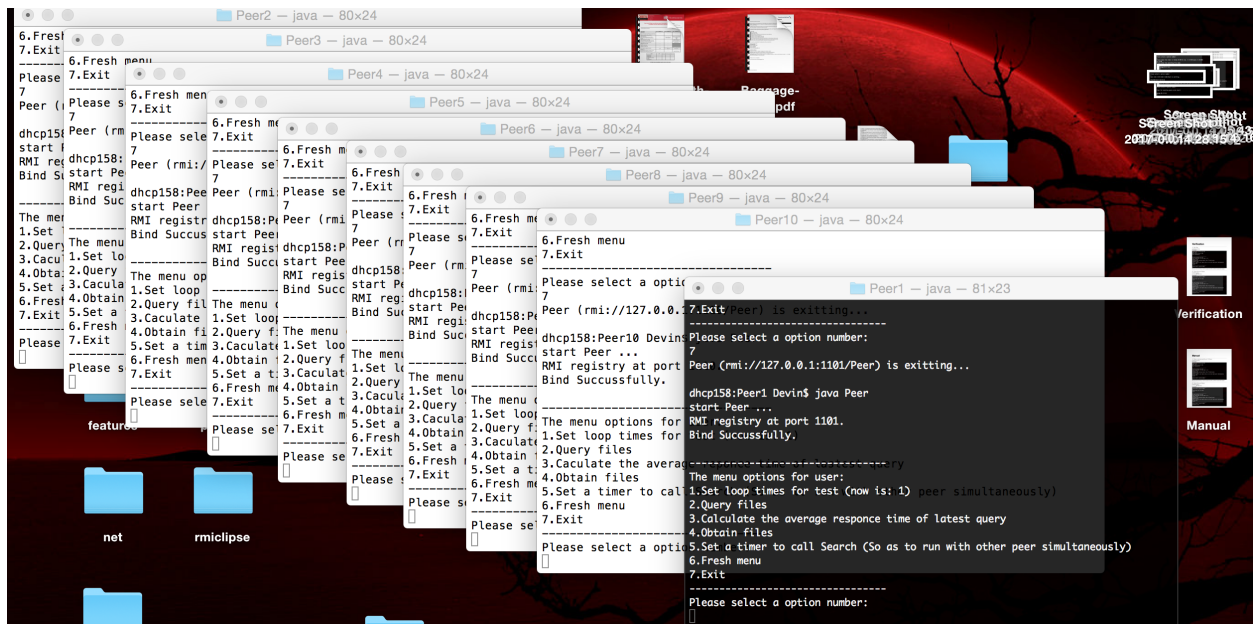


# Manual

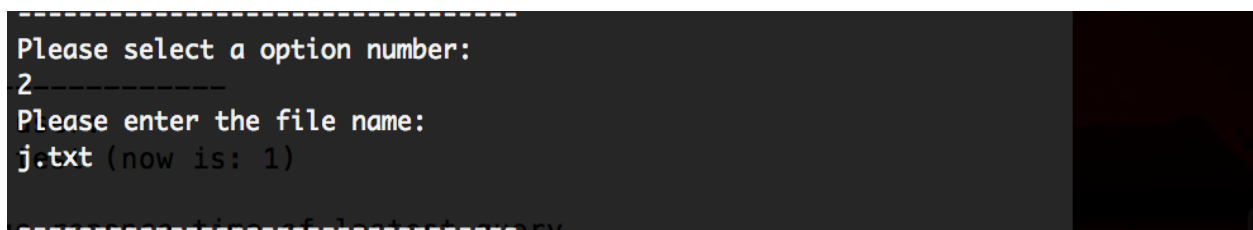
## 1) Open a terminal and Run all 10 Peers



Open 10 terminal windows, compile the java file first with “javac \*.java”, then run all the peers by “java peer”.

## 2) Query

Use the option 2 in menu to query files. Then enter the file name.



### 3) Obtain the file which queried











Use option 4 in the menu, and enter the file name which queried in option 2. The list indicate there are several peers have the sources.

```
Please select a option number:
message 01-3 hit! of lastest query
4
Please enter the file name: j.txt
There are all address of the peers keeping file j.txt:
1. rmi://127.0.0.1:1102/Peer
2. rmi://127.0.0.1:1103/Peer
3. rmi://127.0.0.1:1104/Peer
4. rmi://127.0.0.1:1105/Peer

You can choose one to download the file: (Or you can enter 0 to cancel)
```

Then we can choose a peer to download the file, for example choose 3.

```
1. rmi://127.0.0.1:1102/Peer
2. rmi://127.0.0.1:1103/Peer
3. rmi://127.0.0.1:1104/Peer
4. rmi://127.0.0.1:1105/Peer
1110.
You can choose one to download the file: (Or you can enter 0 to cancel)
3
The file j.txt has been saved in the path: files/ Successfully.
The download speed is 2.613 MB/s
```

Name	^	Date Modified	Size
 a.txt		Jan 26, 2017, 07:52	2 KB
 b.txt		Jan 26, 2017, 07:52	4 KB
 c.txt		Jan 26, 2017, 07:52	6 KB
 d.txt		Jan 26, 2017, 07:52	8 KB
 e.txt		Jan 26, 2017, 07:53	10 KB
 f.txt		Jan 26, 2017, 07:54	12 KB
 g.txt		Jan 26, 2017, 07:54	14 KB
 h.txt		Jan 26, 2017, 07:54	16 KB
 i.txt		Jan 26, 2017, 07:54	18 KB
 j.txt		Today, 15:15	20 KB

Download success.

---

#### 4) Calculate the avg. response time

We can use option 3 in the menu to measure the avg. response time.

```
-----  
Please select a option number:  
3ser:  
The avg response time for lastest qurey is: 35.779 ms
```

---

#### 5) Set Loop time

We also can set a loop to make it loop any times. The option 1 in the menu is to set a loop, then enter the loop number you want to set.

```
-----  
Please select a option number:  
1  
Please enter the loop time number:  
500-----  
The loop time has been set as: 500.  
test (now is: 1)
```

---

#### 6) Set a timer

We can set a timer to make the query happen in a certain time. The option 5 is to set a timer, the time we enter should be like the form of hour min sec(like 14 14 00). Then enter the file name which we want to query. When the time comes, the query will automatically execute.

```
-----  
Please select a option number:  
5ser:  
Please input the timer in format HH MM SS (ex. 11 30 00 means 11:30:00)  
15 26 00  
Please enter the searching file name:  
j.txt  
You create a query task for j.txt (other peer simultaneously)  
It will start at Sun Feb 26 15:26:00 CST 2017
```

---

## 7) Fresh menu

We develop a function of fresh menu(option 6) which is in order to make the terminal more clean. It will recall the menu.

```
messge 01-499 hit!
messge 01-500 hit!
messge 01-501 hit!
messge 01-502 hit!
messge 01-503 hit!
6
time of lastest query
-----
as to run with other peer simultaneously)
The menu options for user:
1.Set loop times for test (now is: 500)
2.Query files
3.Calculate the average responce time of latest query
4.Obtain files
5.Set a timer to call Search (So as to run with other peer simultaneously)
6.Fresh menu
7.Exit
-----
Please select a option number:
█
```

---

## 8) Exit Peer

Option 7 is to exit the peer.

```
Please select a option number:
7
Peer (rmi://127.0.0.1:1101/Peer) is exiting...
dhcp158:Peer1 Devin$ █
```