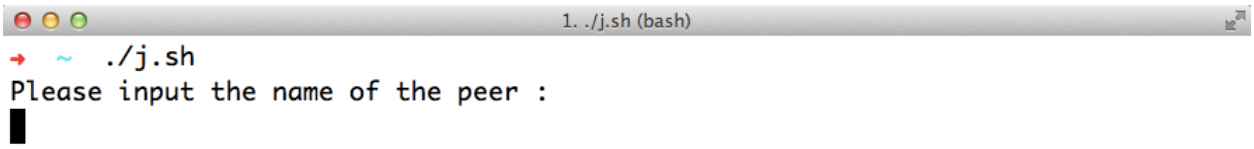
4. Manual

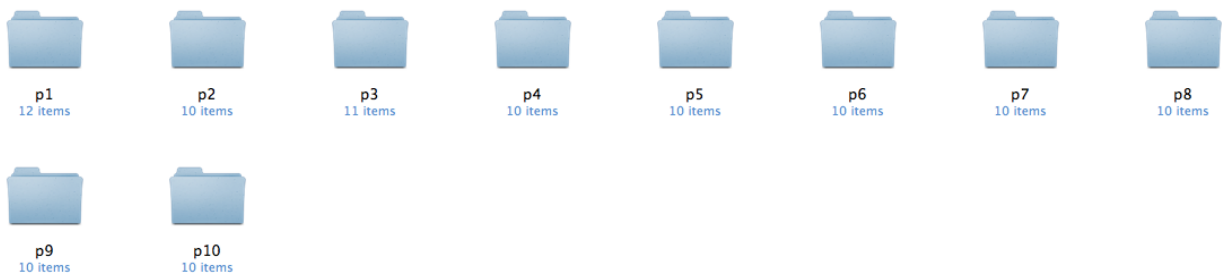
1. Running Environment
Platform: Java SE-1.6
OS: Window 7, Mac OS X 10.8.5 or Ubuntu 12.04 LTS

2. How to run

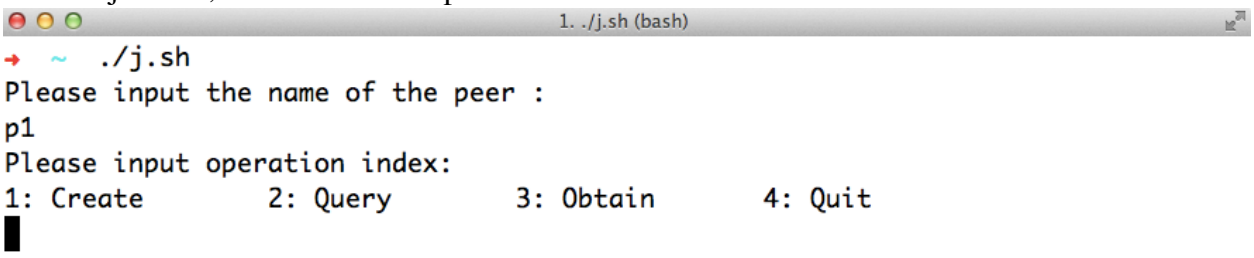
Executable jar files: P2PSystem.jar.
We use a shell script j.sh, thus, when we launch a terminal, we just input ./j.sh.



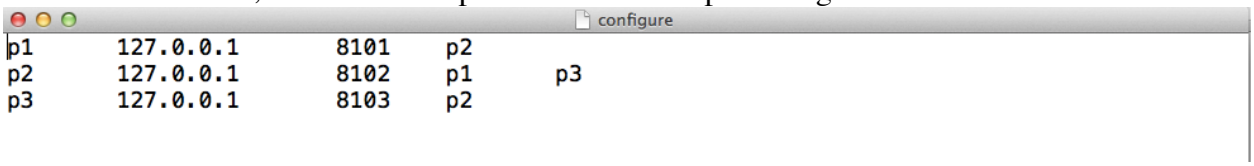
3. Input client name:
All the client names are as follows:



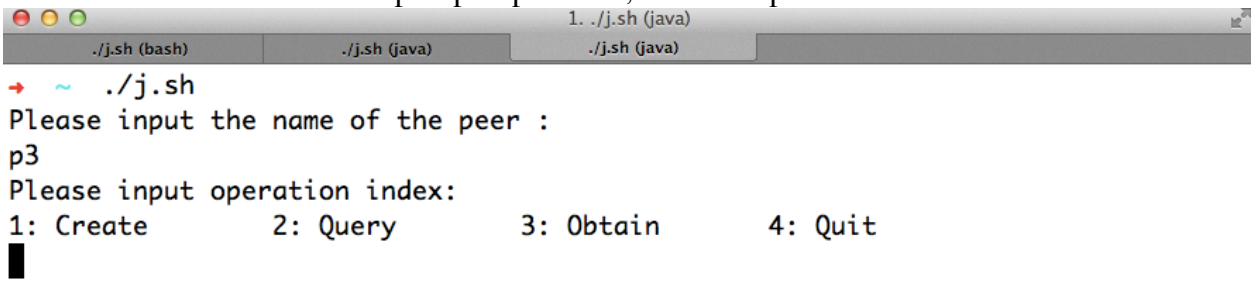
When a jar runs, we should first input the client name.



As for convenience, we demo our operation with a simple configuration file.

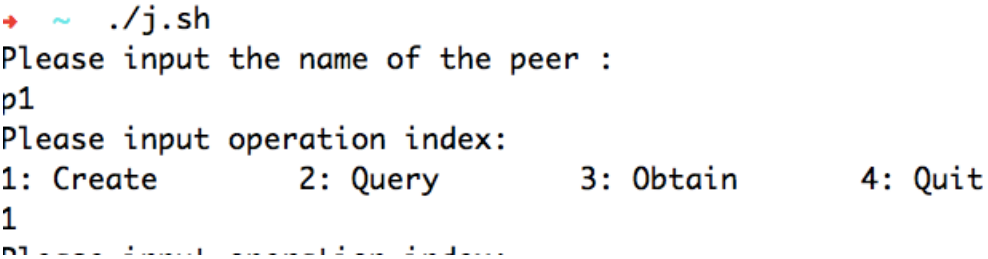


It is like a chain with 3 nodes. p1 - p2 - p3. Thus, we need open three terminals.



4. Connections initialization.

After all clients input their names, we should input command 1 in all terminals to create the network.



5. Query

After the network established, a client can choose query a file or obtain a file. Logically, a client queries a file first.
User is required to input the file name and ttl (we design this because this is a static network).

```
Please input the file name you are looking for:
tianyang
Please input the TTL:
2
Please input operation index:
1: Create        2: Query        3: Obtain       4: Quit
p2 has the file.
p3 has the file.
```

Clients who have this file are listed.

Other clients prints whether they have this file.

```
➜  ~  ./j.sh
Please input the name of the peer :
p2
Please input operation index:
1: Create        2: Query        3: Obtain       4: Quit
1
Please input operation index:
1: Create        2: Query        3: Obtain       4: Quit
I have tianyang
```

6. Obtain.

The user input the filename and client name, then download.

```
Please input the file name you want to download :
tianyang
Please select the peer name you want to download from :
p2
socket index is 0
```

P2 displays which file is going to be downloaded.

```
➜  ~  ./j.sh
Please input the name of the peer :
p2
Please input operation index:
1: Create        2: Query        3: Obtain       4: Quit
1
Please input operation index:
1: Create        2: Query        3: Obtain       4: Quit
I have tianyang
Download file is tianyang
```

P1 displays

```
Please input the file name you want to download :
tianyang
Please select the peer name you want to download from :
p2
Download file tianyang successfully
```