

Output

The Outputs of functions 1~5 has been introduced in the previous project document. The previous file has been attached in this project folder.

1) Run Peer

Command: `java Peer`

Peer Output:

```
dhcp24:program Devin$ cd Peer1
dhcp24:Peer1 Devin$ javac Peer.java
dhcp24:Peer1 Devin$ javac PeerI.java
dhcp24:Peer1 Devin$ java Peer
start Peer ...
RMI registry at port 1101.
Bind Succussfully.

-----
The menu options for user:
1.Set loop times for test (now is: 1)
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.Set TTR (now is :60)
7.Set push/pull mode. (now: None)
8Simply modify file (change last-modify-time to now).
9.Show master copy and cached copy on this peer.
10.Fresh menu
11.Exit
-----
Please select a option number:
█
```

2) Push

Command: option 7(switch to push model)

Peer Output:

```
-----
Please select a option number:
7
Please select a option mode: 1.Push 2.Pull 3.None
1
7.Set push/pull mode. (now: Push)
```

Command: option 2(Peer1)
file name: g7.txt

Peer Output:

```
-----  
Please select a option number:  
2  
Please enter the file name:  
g7.txt  
  
Please select a option number:  
message 01-1 hit!  
█
```

Command: option 4 (download the file)

Peer Output:

```
-----  
Please select a option number:  
4  
Please enter the file name:  
g7.txt  
There are all address of the peers keeping file g7.txt:  
1. rmi://127.0.0.1:1107/Peer Time: 2017-03-20 04:23:49 (Origin)  
  
You can choose one to download the file: (Or you can enter 0 to cancel)  
█
```

Command: option 2&option 4(Peer2)(to test if peer1 has the file"g7.txt")
(Peer2~10 are all white background)
file name: g7.txt

Peer Output:

```
Please select a option number:  
message 02-2 hit!  
4  
Please enter the file name:  
g7.txt  
There are all address of the peers keeping file g7.txt:  
1. rmi://127.0.0.1:1101/Peer Time: 2017-03-20 04:23:49 (Cached copy)  
2. rmi://127.0.0.1:1107/Peer Time: 2017-03-20 04:23:49 (Origin)
```

Command: option 9(Peer1)

Peer Output:

```
=====
Please select a option number:
9
----The information for master copy:
a5.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:53:56
a6.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:04
a9.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:36
a10.txt     VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:46
a8.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:26
.DS_Store   VersionNo: 1      Last-Modify-Time: 2017-03-20 03:30:53
a7.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:16
a4.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:52:56
a1.txt      VersionNo: 1      Last-Modify-Time: 2017-03-13 01:30:42
a2.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:52:30
a3.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:52:46
----The information for cached copy:
g7.txt      VersionNo: 1      Last-Modify-Time: 2017-03-20 04:23:49 (VALID)
Please press enter to return to the menu.
```

Command: option 8&option 9(Only can modify in Peer7)

Peer Output:

```
=====
Please select a option number:
8
Please enter the file name of master copy:
g7.txt
Change last modify time to 2017-03-20 05:25:35 Successfully!

=====
Please select a option number:
9
----The information for master copy:
g1.txt      VersionNo: 1      Last-Modify-Time: 2017-03-13 01:30:42
g10.txt     VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:46
g7.txt      VersionNo: 2      Last-Modify-Time: 2017-03-20 05:25:35
g6.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:04
g5.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:53:56
g3.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:52:46
g2.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:52:30
g4.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:52:56
g9.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:36
.DS_Store   VersionNo: 1      Last-Modify-Time: 2017-03-20 03:43:00
g8.txt      VersionNo: 1      Last-Modify-Time: 2017-01-26 06:54:26
----The information for cached copy:
No cached copy
Please press enter to return to the menu.
```

Peer1 Output:

```
3:49 (Origin)
Please select a option number:
an enter 0 to cancel)
Invalidation Notice: The file g7.txt is invalid now.
```

Peer Output: (option 9 state)

```
----The information for cached copy:
g7.txt VersionNo: 1 Last-Modify-Time: 2017-03-20 04:23:49 (INVALID)
Please press enter to return to the menu.
an enter 0 to cancel)
```

Command: option 2&option 4(Peer2)

Peer Output:

```
=====
Please select a option number:
messge 02-3 hit!
4
Please enter the file name:
g7.txt
There are all address of the peers keeping file g7.txt:
1. rmi://127.0.0.1:1107/Peer Time: 2017-03-20 05:25:35 (Origin)
```

3) Pull

Command: option 7 (All Peers)

Peer Output: (take Peer1's as example)

```
Please select a option number:
7
Please select a option mode: 1.Push 2.Pull 3.None
2

-----
The menu options for user:
1.Set loop times for test (now is: 1)
2.Query files
3.Calculate the average response time of latest query
4.Obtain files
5.Set a timer to call Search (So as to run with other peer simultaneously)
6.Set TTR (now is :60)
7.Set push/pull mode. (now: Pull)
8Simply modify file (change last-modify-time to now).
9.Show master copy and cached copy on this peer.
10.Fresh menu
11.Exit
-----
```

Command: option 2

filename: f6.txt

Peer Output:

```
Please select a option number:
2
Please enter the file name:
f6.txt

-----
messge 01-1 hit!
```

Command: option 4

filename: f6.txt

Peer Output:

```
Please select a option number:
messge 01-1 hit!
4
Please enter the file name:
f6.txt
There are all address of the peers keeping file f6.txt:
1. rmi://127.0.0.1:1106/Peer Time: 2017-01-26 06:54:04 (Origin)

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

Command: option 2&option 4(Peer2)(to test if peer1 has the file"f6.txt")
(Peer2~10 are all white background)
file name: f6.txt

Peer Output:

```
-----
Please select a option number:
messge 02-1 hit!
4
Please enter the file name:
f6.txt
There are all address of the peers keeping file f6.txt:
1. rmi://127.0.0.1:1101/Peer Time: 2017-01-26 06:54:04 (Cached copy)
2. rmi://127.0.0.1:1106/Peer Time: 2017-01-26 06:54:04 (Origin)
```

Command: option 9(Peer1)

Peer Output:

```
-----
Please select a option number:
9
----The information for master copy:
a5.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:53:56
a6.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:04
a9.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:36
a10.txt     VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:46
a8.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:26
.DS_Store   VersionNo: 1    Last-Modify-Time: 2017-03-20 03:30:53
a7.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:16
a4.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:52:56
a1.txt      VersionNo: 1    Last-Modify-Time: 2017-03-13 01:30:42
a2.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:52:30
a3.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:52:46
----The information for cached copy:
f6.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:04 (VALID)
TTR: 60 Refresh Time: 2017-03-20 06:03:14
```

Command: option 8&option 9(Only can modify in Peer6)

Peer Output:

```
-----
Please select a option number:
8
-----
Please select a option number:
9
----The information for master copy:
f4.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:52:56
f10.txt     VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:46
.DS_Store   VersionNo: 1    Last-Modify-Time: 2017-03-20 03:40:58
f1.txt      VersionNo: 1    Last-Modify-Time: 2017-03-13 01:30:42
f2.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:52:30
f3.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:52:46
f9.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:36
f5.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:53:56
f8.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:26
f6.txt      VersionNo: 2    Last-Modify-Time: 2017-03-20 06:05:51
f7.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:16
----The information for cached copy:
No cached copy
```


Peer1 Output:

```
Please press enter to return to the menu.  
Pull Notice: the file f6.txt is now invalid.
```

Peer Output: (option 9 state)

```
----The information for cached copy:  
f6.txt      VersionNo: 1    Last-Modify-Time: 2017-01-26 06:54:04 (INVALID)  
an enter 0 to cancel    TTR: 60 Refresh Time: 2017-03-20 06:05:14  
Please press enter to return to the menu.
```

Command: option 2&option 4(Peer2)

Peer Output:

```
-----  
Please select a option number:  
messge 02-2 hit!  
4  
Please enter the file name:  
f6.txt  
There are all address of the peers keeping file f6.txt:  
1. rmi://127.0.0.1:1106/Peer Time: 2017-03-20 06:05:51 (Origin)
```