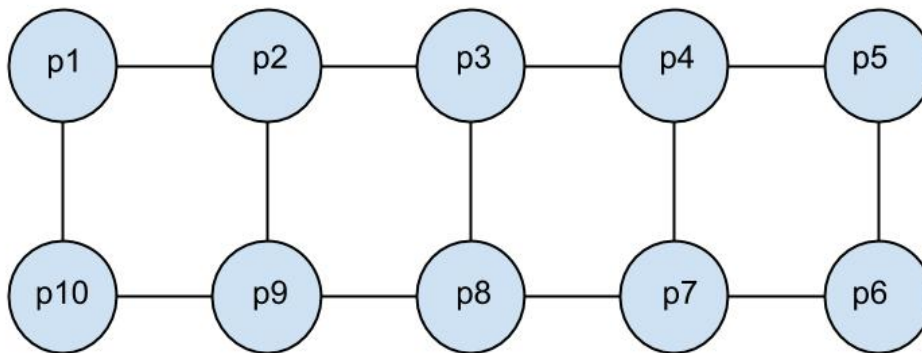


1. Output File

We mainly discuss query and obtain, other operations are listed in manual.

We use a 2-d mesh topology.



1. query

We demo that p1 wants to query a file named 123, which is stored in p6 and p8.

```
Client [Java Application] /System/Library/Java/JavaVirtualMachines/1.6.0.jdk/Contents/Home/bin/java (Oct 7, 2013, 2:24:20 PM)
1: Create      2: Query      3: Obtain      4: Quit
2
Please input the file name you are looking for:
123
Please input the TTL:
5
Please input operation index:
1: Create      2: Query      3: Obtain      4: Quit

p8 has the file.
p6 has the file.
```

2. download.

We download a file named p10-file from p10 to p1.

The content of p10-file is :

```
→ p10 cat p10-file
This is tianyang
```

```

Please input operation index:
1: Create      2: Query      3: Obtain      4: Quit
3
Please input the file name you want to download :
p10-file
Please select the peer name you want to download from :
p10
Download file p10-file successfully
Please input operation index:
1: Create      2: Query      3: Obtain      4: Quit
command 5
file content is :
This is tianyang

```

The file size is

→ p1 ls -l

total 176

```

-rw-r--r--@ 1 yangkkl staff 10013 Oct  7 12:04 10K.txt
-rw-r--r--@ 1 yangkkl staff  1002 Oct  7 12:04 1K.txt
-rw-r--r--@ 1 yangkkl staff  2002 Oct  7 12:04 2K.txt
-rw-r--r--@ 1 yangkkl staff  3004 Oct  7 12:04 3K.txt
-rw-r--r--@ 1 yangkkl staff  4005 Oct  7 12:04 4K.txt
-rw-r--r--@ 1 yangkkl staff  5006 Oct  7 12:04 5K.txt
-rw-r--r--@ 1 yangkkl staff  6007 Oct  7 12:04 6K.txt
-rw-r--r--@ 1 yangkkl staff  7008 Oct  7 12:04 7K.txt
-rw-r--r--@ 1 yangkkl staff  8009 Oct  7 12:04 8K.txt
-rw-r--r--@ 1 yangkkl staff  9011 Oct  7 12:04 9K.txt
-rw-r--r--@ 1 yangkkl staff  7008 Oct  7 12:04 SevenK.txt
-rw-r--r--@ 1 yangkkl staff  3004 Oct  7 12:04 ThreeK.txt
-rw-r--r--  1 yangkkl staff   17 Oct  7 14:36 p10-file

```

original file is :

total 152

```
-rw-r--r--@ 1 yangkkl staff 10013 Oct 7 12:04 10K.txt
-rw-r--r--@ 1 yangkkl staff 2002 Oct 7 12:04 2K.txt
-rw-r--r--@ 1 yangkkl staff 3004 Oct 7 12:04 3K.txt
-rw-r--r--@ 1 yangkkl staff 4005 Oct 7 12:04 4K.txt
-rw-r--r--@ 1 yangkkl staff 6007 Oct 7 12:04 6K.txt
-rw-r--r--@ 1 yangkkl staff 8009 Oct 7 12:04 8K.txt
-rw-r--r--@ 1 yangkkl staff 9011 Oct 7 12:04 9K.txt
-rw-r--r--@ 1 yangkkl staff 5006 Oct 7 12:04 FiveK.txt
-rw-r--r--@ 1 yangkkl staff 1002 Oct 7 12:04 OneK.txt
-rw-r--r--@ 1 yangkkl staff 7008 Oct 7 12:04 SevenK.txt
-rw-r--r-- 1 yangkkl staff 17 Oct 7 14:33 p10-file
```

They are of the same size, which proves the downloading operation successful.

```
Client [Java Application] /System/Library/Java/JavaVirtualMachines/1.6.0.jdk/Contents/Home/bin/java (Oct 7, 2013, 2:35:23 PM)
Please input operation index:
1: Create      2: Query      3: Obtain      4: Quit
3
Please input the file name you want to download :
p10-file
Please select the peer name you want to download from :
p10
Download file p10-file successfully
Please input operation index:
1: Create      2: Query      3: Obtain      4: Quit
command 5
file content is :
This is tianyang
```

I start this console at 2:35, and then open other consoles. The download file is created at 14:36, which means it is downloaded by my program other than my own copy and paste operation.