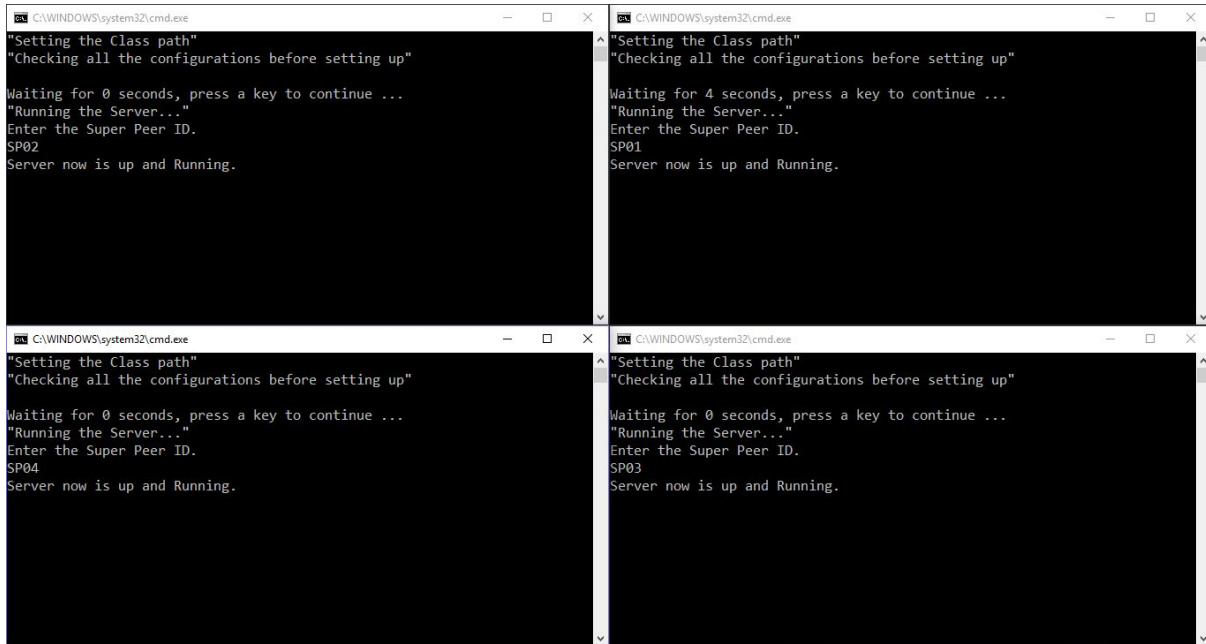


## Output file

### 1. Launching Multiple Super Peer by providing its unique ID



The image displays four terminal windows, each showing the execution of a Super Peer. The windows are titled "C:\WINDOWS\system32\cmd.exe". Each window contains the following text:

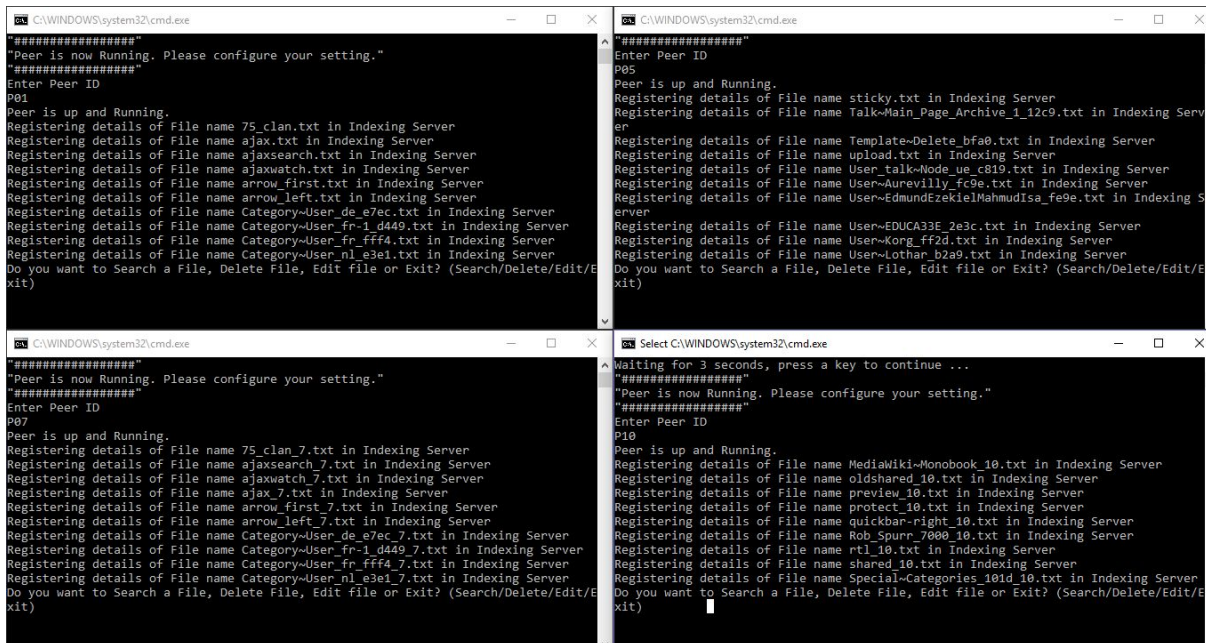
```
"Setting the Class path"
"Checking all the configurations before setting up"

Waiting for 0 seconds, press a key to continue ...
"Running the Server..."
Enter the Super Peer ID.
SP02
Server now is up and Running.
```

The first two windows show SP02 and SP01, while the last two show SP04 and SP03. The output is consistent across all four windows, indicating a successful launch of each Super Peer.

### 2. Running Multiple Leaf Nodes under multiple super peers

Here P01 is running under SP01, P05 under SP02, P07 under SP03, and P10 under SP04



The image displays four terminal windows, each showing the execution of a Leaf Node. The windows are titled "C:\WINDOWS\system32\cmd.exe". Each window contains the following text:

```
*****
"Peer is now Running. Please configure your setting."
*****
Enter Peer ID
P01
Peer is up and Running.
Registering details of File name 75_clan.txt in Indexing Server
Registering details of File name ajax.txt in Indexing Server
Registering details of File name ajaxsearch.txt in Indexing Server
Registering details of File name ajaxwatch.txt in Indexing Server
Registering details of File name arrow_first.txt in Indexing Server
Registering details of File name arrow_left.txt in Indexing Server
Registering details of File name Category-User_de_e7ec.txt in Indexing Server
Registering details of File name Category-User_fr-1_d449.txt in Indexing Server
Registering details of File name Category-User_fr_ff4.txt in Indexing Server
Registering details of File name Category-User_nl_e381.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
```

The first three windows show P01, P05, and P07, while the last window shows P10. The output is consistent across all four windows, indicating a successful launch of each Leaf Node.

### 3. Indexing Server(Super Peers) while Registration of Peers is going on

```
Select C:\WINDOWS\system32\cmd.exe
Enter the Super Peer ID.
SP01
Server now is up and Running.
#####
THE UPDATED INDEX at 2018/11/02 11:46:39
75_clan.txt => [[75_clan.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.11.47.18, 30, P01]]
#####
THE UPDATED INDEX at 2018/11/02 11:46:39
75_clan.txt => [[75_clan.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.11.47.18, 30, P01]]
ajax.txt => [[ajax.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.11.47.18, 30, P01]]
#####
THE UPDATED INDEX at 2018/11/02 11:46:39

C:\WINDOWS\system32\cmd.exe
Enter the Super Peer ID.
SP02
Server now is up and Running.
#####
THE UPDATED INDEX at 2018/11/02 11:46:46
sticky.txt => [[sticky.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.11.47.37, 30, P05]]
#####
THE UPDATED INDEX at 2018/11/02 11:46:46
sticky.txt => [[sticky.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.11.47.37, 30, P05]]
Talk-Main_Page_Archive_1_12c9.txt => [[Talk-Main_Page_Archive_1_12c9.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.11.47.37, 30, P05]]
#####
THE UPDATED INDEX at 2018/11/02 11:46:46

C:\WINDOWS\system32\cmd.exe
Enter the Super Peer ID.
SP03
Server now is up and Running.
#####
THE UPDATED INDEX at 2018/11/02 11:46:52
75_clan.7.txt => [[75_clan.7.txt, P07, 4007, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Master_Copy, SP03, MC, v01, valid, 2018.11.02.11.47.58, 30, P07]]
#####
THE UPDATED INDEX at 2018/11/02 11:46:52
75_clan.7.txt => [[75_clan.7.txt, P07, 4007, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Master_Copy, SP03, MC, v01, valid, 2018.11.02.11.47.58, 30, P07]]
ajaxsearch.7.txt => [[ajaxsearch.7.txt, P07, 4007, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Master_Copy, SP03, MC, v01, valid, 2018.11.02.11.47.58, 30, P07]]
#####
THE UPDATED INDEX at 2018/11/02 11:46:52

C:\WINDOWS\system32\cmd.exe
Enter the Super Peer ID.
SP04
Server now is up and Running.
#####
THE UPDATED INDEX at 2018/11/02 11:47:01
MediaWiki-Monobook_10.txt => [[MediaWiki-Monobook_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.11.48.06, 30, P10]]
#####
THE UPDATED INDEX at 2018/11/02 11:47:01
MediaWiki-Monobook_10.txt => [[MediaWiki-Monobook_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.11.48.06, 30, P10]]
oldshared_10.txt => [[oldshared_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.11.48.07, 30, P10]]
#####
THE UPDATED INDEX at 2018/11/02 11:47:01
```

### 4. Each Peer is having 2 directories Master copy and cached Copy

```
Pranav Makkar@DESKTOP-8N9Q885 /cygdrive/k/IIT Life/Lecture Notes/SEM 1 - DIC AOS DPA/AOS/Homework-Programming/PA-3
$ ls -ltr
total 274
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 112758 Oct 23 2013 javax.ws.rs-api-2.0.jar
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 235 Oct 28 19:43 TopologyDetails_config.txt
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 71 Oct 28 19:43 Topology.txt
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 181 Oct 28 19:43 superpeer_config.txt
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:01 Eval_Peer1
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:10 Eval_Peer6
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:11 Eval_Peer2
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:12 Eval_Peer3
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:12 Eval_Peer4
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:12 Eval_Peer5
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:13 Eval_Peer7
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:13 Eval_Peer8
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:13 Eval_Peer9
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:13 Eval_Peer10
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:13 Eval_Peer11
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:14 Eval_Peer12
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 2677 Oct 28 20:20 peer_config.txt
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 97569 Nov 2 01:07 GnutellaP2P_win.jar
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 471 Nov 2 01:08 run_test.bat
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 339 Nov 2 01:08 run_peer.bat
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 288 Nov 2 01:08 run_server.bat
-rwxrwx--> 1 Pranav Makkar Pranav Makkar 87 Nov 2 01:10 Consistency_config.txt
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Nov 2 11:54 Deliverables

Pranav Makkar@DESKTOP-8N9Q885 /cygdrive/k/IIT Life/Lecture Notes/SEM 1 - DIC AOS DPA/AOS/Homework-Programming/PA-3
$ for x in `ls | grep -i Eval_Peer | vargs` ; do echo "K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\$x" ; ls -ltr $x ; done
K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1
total 4
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:01 Master_Copy
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Nov 2 11:55 Cache_Copy
K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10
total 4
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:13 Master_Copy
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Nov 2 11:56 Cache_Copy
K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer11
total 4
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:13 Master_Copy
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Nov 2 11:56 Cache_Copy
K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer12
total 4
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:14 Master_Copy
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 30 21:06 Cache_Copy
K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2
total 4
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Oct 28 20:11 Master_Copy
drwxrwx--> 1 Pranav Makkar Pranav Makkar 0 Nov 2 11:55 Cache_Copy
K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer3
```

## PUSH VERSION

- Leaf Node 5 and Leaf Node 7 wants to Search and download a file named "75\_clan.txt" and update their cached table

```
C:\WINDOWS\system32\cmd.exe
"Setting the Class path"
"Running the Peer..."

Waiting for 2 seconds, press a key to continue ...
"*****"
"Peer is now Running. Please configure your setting."
"*****"
Enter Peer ID
P05
Peer is up and Running.
Registering details of File name sticky.txt in Indexing Server
Registering details of File name Talk-Main_Page_Archive_1_12c9.txt in Indexing Server
Registering details of File name Template-Delete_bfa0.txt in Indexing Server
Registering details of File name upload.txt in Indexing Server
Registering details of File name User_talk-Node_ue_c819.txt in Indexing Server
Registering details of File name User-Aurevilly_fc9e.txt in Indexing Server
Registering details of File name User-EdmundEzekielMahmudIsa_fe9e.txt in Indexing Server
Registering details of File name User~EDUCA33E_2a3c.txt in Indexing Server
Registering details of File name User-Kong_ff2d.txt in Indexing Server
Registering details of File name User-Lothar_b2a9.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
sEARCH
Enter the file name which you want to search
75_clan.txt
Now Started Calling the query() from Leaf Node...
*****

VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy

*****
Enter Peer ID you wish to take the file from
P01
5854
File Downloading Successful.
Display File 75_clan.txt
Updated Cached Table Entry after insertion (File download)
75_clan.txt => [75_clan.txt, CC, K:\IIIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
```

```
C:\WINDOWS\system32\cmd.exe
"Setting the Class path"
"Running the Peer..."

Waiting for 2 seconds, press a key to continue ...
"*****"
"Peer is now Running. Please configure your setting."
"*****"
Enter Peer ID
P07
Peer is up and Running.
Registering details of File name 75_clan_7.txt in Indexing Server
Registering details of File name ajaxsearch_7.txt in Indexing Server
Registering details of File name ajaxwatch_7.txt in Indexing Server
Registering details of File name ajax_7.txt in Indexing Server
Registering details of File name arrow_first_7.txt in Indexing Server
Registering details of File name arrow_left_7.txt in Indexing Server
Registering details of File name Category-User_de_e7ec_7.txt in Indexing Server
Registering details of File name Category-User_fr-1_d449_7.txt in Indexing Server
Registering details of File name Category-User_fr_fff4_7.txt in Indexing Server
Registering details of File name Category-User_nl_e3e1_7.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Search
Enter the file name which you want to search
75_clan.txt
Now Started Calling the query() from Leaf Node...
*****

VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy
VALID Peer providing the file with Peer ID is P05 under Super Peer :SP02 which is a Cached Copy

*****
Enter Peer ID you wish to take the file from
P05
5854
File Downloading Successful.
Display File 75_clan.txt
Updated Cached Table Entry after insertion (File download)
75_clan.txt => [75_clan.txt, CC, K:\IIIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
```

Cached Table contains the details of the downloaded file.



## 6. Leaf Node P10 wants to search the same file “75\_clan.txt”.

```
C:\WINDOWS\system32\cmd.exe
"Setting the Class path"
"Running the Peer..."

Waiting for 1 seconds, press a key to continue ...
"#####"
"Peer is now Running. Please configure your setting."
"#####"
Enter Peer ID
P10
Peer is up and Running.
Registering details of File name MediaWiki-Monobook_10.txt in Indexing Server
Registering details of File name oldshared_10.txt in Indexing Server
Registering details of File name preview_10.txt in Indexing Server
Registering details of File name protect_10.txt in Indexing Server
Registering details of File name quickbar-right_10.txt in Indexing Server
Registering details of File name Rob_Spurr_7000_10.txt in Indexing Server
Registering details of File name rtl_10.txt in Indexing Server
Registering details of File name shared_10.txt in Indexing Server
Registering details of File name Special-Categories_101d_10.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Search
Enter the file name which you want to search
75_clan.txt
Now Started Calling the query() from Leaf Node...
#####

VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy
VALID Peer providing the file with Peer ID is P05 under Super Peer :SP02 which is a Cached Copy
VALID Peer providing the file with Peer ID is P07 under Super Peer :SP03 which is a Cached Copy

#####
Enter Peer ID you wish to take the file from
```

## 7. Now Leaf Node P01 wants to edit 75\_clan.txt (master copy) file.

```
C:\WINDOWS\system32\cmd.exe
"Running the Peer..."

Waiting for 0 seconds, press a key to continue ...
"#####"
"Peer is now Running. Please configure your setting."
"#####"
Enter Peer ID
P01
Peer is up and Running.
Registering details of File name 75_clan.txt in Indexing Server
Registering details of File name ajax.txt in Indexing Server
Registering details of File name ajaxsearch.txt in Indexing Server
Registering details of File name ajaxwatch.txt in Indexing Server
Registering details of File name arrow_first.txt in Indexing Server
Registering details of File name arrow_left.txt in Indexing Server
Registering details of File name Category-User_de_e7ec.txt in Indexing Server
Registering details of File name Category-User_fr-1_d449.txt in Indexing Server
Registering details of File name Category-User_fr_fff4.txt in Indexing Server
Registering details of File name Category-User_nl_e3e1.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Edit
Enter the file name which you want to Edit(Append)
75_clan.txt

C:\WINDOWS\system32\cmd.exe
#####
VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy

#####
Enter Peer ID you wish to take the file from
P01
5854
File Downloading Successful.
Display File 75_clan.txt
Updated Cached Table Entry after insertion (File download)
75_clan.txt => [75_clan.txt, CC, K:\IIIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)

C:\WINDOWS\system32\cmd.exe
VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy
VALID Peer providing the file with Peer ID is P05 under Super Peer :SP02 which is a Cached Copy

#####
Enter Peer ID you wish to take the file from
P05
5854
File Downloading Successful.
Display File 75_clan.txt
Updated Cached Table Entry after insertion (File download)
75_clan.txt => [75_clan.txt, CC, K:\IIIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
NO
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)
```

8. Leaf node P01 sends an invalidate message to all cached copies of file 75\_clan.txt (P05 and P07)

```
C:\WINDOWS\system32\cmd.exe
"Running the Peer..."
Waiting for 3 seconds, press a key to continue ...
"*****"
"Peer is now Running. Please configure your setting."
"*****"
Enter Peer ID
P01
Peer is up and Running.
Registering details of File name 75_clan.txt in Indexing Server
Registering details of File name ajax.txt in Indexing Server
Registering details of File name ajaxsearch.txt in Indexing Server
Registering details of File name ajaxwatch.txt in Indexing Server
Registering details of File name arrow.first.txt in Indexing Server
Registering details of File name arrow.left.txt in Indexing Server
Registering details of File name Category-User_de_e7ec.txt in Indexing Server
Registering details of File name Category-User_fr_1_d449.txt in Indexing Server
Registering details of File name Category-User_fr_fff4.txt in Indexing Server
Registering details of File name Category-User_nl_e3e1.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Edit
Enter the file name which you want to Edit(Append)
75_clan.txt
Enter anything you want to append in this file
This is push demo
File edited Successfully.
New Version Number for edited file : v02
Send invalidate request to all nodes (PUSH)

Select C:\WINDOWS\system32\cmd.exe
P01
5888
File Downloading Successful.
Display File 75_clan.txt
Updated Cached Table Entry after insertion (File download)
75_clan.txt => [75_clan.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)
Updated Cached Table Entry after updation
75_clan.txt -> [75_clan.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Cache_Copy, v01, P01, invalid, 30]

Select C:\WINDOWS\system32\cmd.exe
P05
5888
File Downloading Successful.
Display File 75_clan.txt
Updated Cached Table Entry after insertion (File download)
75_clan.txt => [75_clan.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)
Updated Cached Table Entry after updation
75_clan.txt -> [75_clan.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Cache_Copy, v01, P01, invalid, 30]
```

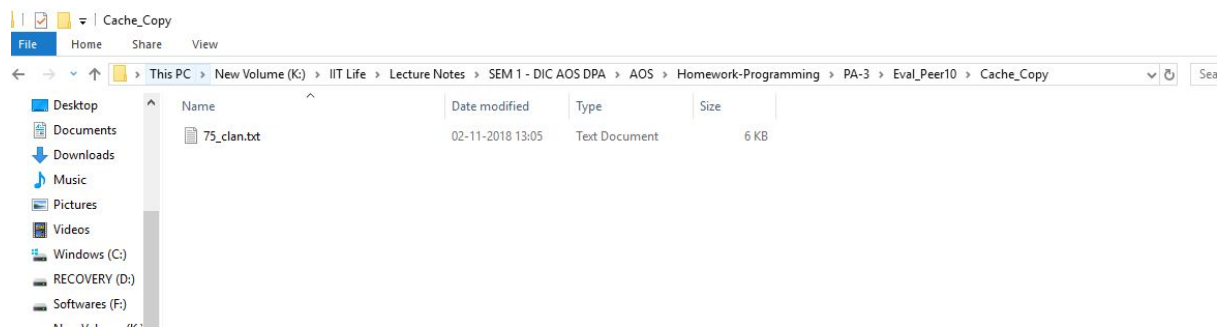
9. Now Leaf Node P10 again searches for same file “75\_clan.txt” and downloads the updated version copy (v02) from Master node (P01).

```
"Peer is now Running. Please configure your setting."
"*****"
Enter Peer ID
P10
Peer is up and Running.
Registering details of File name MediaWiki-Monobook 10.txt in Indexing Server
Registering details of File name oldshared_10.txt in Indexing Server
Registering details of File name preview_10.txt in Indexing Server
Registering details of File name protect_10.txt in Indexing Server
Registering details of File name quickbar-right_10.txt in Indexing Server
Registering details of File name Rob Spurr 7000 10.txt in Indexing Server
Registering details of File name rtl_10.txt in Indexing Server
Registering details of File name shared_10.txt in Indexing Server
Registering details of File name Special~Categories_10id_10.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Entry not found in cached table
Search
Enter the file name which you want to search
75_clan.txt
Now Started Calling the query() from Leaf Node...
*****

VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy

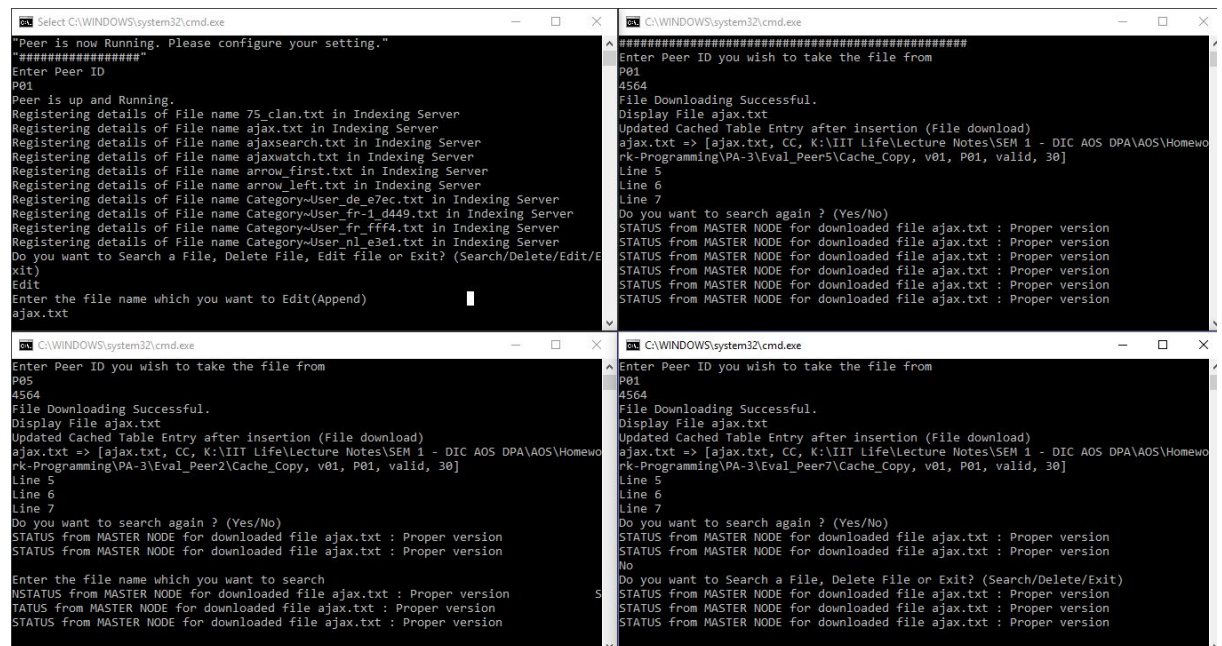
*****
Enter Peer ID you wish to take the file from
P01
5905
File Downloading Successful.
Display File 75_clan.txt
Updated Cached Table Entry after insertion (File download)
75_clan.txt => [75_clan.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Cache_Copy, v02, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)
```

## 10. Downloaded file “75\_clan.txt” in Leaf Node P10 directory.



## PULL VERSION (Leaf Node)

11. Leaf Node 2, Leaf Node 5, and Leaf Node 7 wants to Search and download a file named “ajax.txt” from Leaf Node 1 and update their cached table. After downloading, they will start polling Leaf node 1 (master node)





12. Leaf node 10 also wants to search “ajax.txt” file and it gets 4 valid copies as of now.

```
C:\WINDOWS\system32\cmd.exe
Waiting for 2 seconds, press a key to continue ...
"#####"
"Peer is now Running. Please configure your setting."
"#####"
Enter Peer ID
P10
Peer is up and Running.
Registering details of File name MediaWiki~Monobook_10.txt in Indexing Server
Registering details of File name oldshared_10.txt in Indexing Server
Registering details of File name preview_10.txt in Indexing Server
Registering details of File name protect_10.txt in Indexing Server
Registering details of File name quickbar-right_10.txt in Indexing Server
Registering details of File name Rob_Spurr_7000_10.txt in Indexing Server
Registering details of File name rtl_10.txt in Indexing Server
Registering details of File name shared_10.txt in Indexing Server
Registering details of File name Special~Categories_101d_10.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Search
Enter the file name which you want to search
ajax.txt
Now Started Calling the query() from Leaf Node...
#####
VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy
VALID Peer providing the file with Peer ID is P02 under Super Peer :SP01 which is a Cached Copy
VALID Peer providing the file with Peer ID is P05 under Super Peer :SP02 which is a Cached Copy
VALID Peer providing the file with Peer ID is P07 under Super Peer :SP03 which is a Cached Copy

#####
Enter Peer ID you wish to take the file from
```

13. Now Leaf node 1 to edit “ajax.txt” file while other leaf nodes poll master node.

[illegible]

14. If Leaf Node 10 selects Leaf node 2, which contains invalid copy, it will throw an error and ask user to select Master node.

```
Select C:\WINDOWS\system32\cmd.exe

Waiting for 2 seconds, press a key to continue ...
#####
"Peer is now Running. Please configure your setting."
#####
Enter Peer ID
P10
Peer is up and Running.
Registering details of File name MediaWiki-Monobook_10.txt in Indexing Server
Registering details of File name oldshared_10.txt in Indexing Server
Registering details of File name preview_10.txt in Indexing Server
Registering details of File name protect_10.txt in Indexing Server
Registering details of File name quickbar-right_10.txt in Indexing Server
Registering details of File name Rob_Spurr_7000_10.txt in Indexing Server
Registering details of File name rtl_10.txt in Indexing Server
Registering details of File name shared_10.txt in Indexing Server
Registering details of File name Special-Categories_101d_10.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Search
Enter the file name which you want to search
ajax.txt
Now Started Calling the query() from Leaf Node...
#####

VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy
VALID Peer providing the file with Peer ID is P02 under Super Peer :SP01 which is a Cached Copy
VALID Peer providing the file with Peer ID is P05 under Super Peer :SP02 which is a Cached Copy
VALID Peer providing the file with Peer ID is P07 under Super Peer :SP03 which is a Cached Copy

#####
Enter Peer ID you wish to take the file from
P02
The Peer which you had selected, just got its file invalidated. Please select Master Copy for guaranteed file download.
Peer with that ID P02 does not exist. Please choose proper PeerId.
Do you want to search again ? (Yes/No)
```

15. Now leaf node 10 will again search the same file and will get only one valid copy, i.e. master node Leaf node 1

```
C:\WINDOWS\system32\cmd.exe

ajax.txt
Now Started Calling the query() from Leaf Node...
#####

VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy
VALID Peer providing the file with Peer ID is P02 under Super Peer :SP01 which is a Cached Copy
VALID Peer providing the file with Peer ID is P05 under Super Peer :SP02 which is a Cached Copy
VALID Peer providing the file with Peer ID is P07 under Super Peer :SP03 which is a Cached Copy

#####
Enter Peer ID you wish to take the file from
P02
The Peer which you had selected, just got its file invalidated. Please select Master Copy for guaranteed file download.
Peer with that ID P02 does not exist. Please choose proper PeerId.
Do you want to search again ? (Yes/No)
Yes
Enter the file name which you want to search
ajax.txt
Now Started Calling the query() from Leaf Node...
#####

VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy

#####
Enter Peer ID you wish to take the file from
P01
4601
File Downloading Successful.
Display File ajax.txt
Updated Cached Table Entry after insertion (File download)
ajax.txt => [ajax.txt, CC, K:\IIIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Cache_Copy, v02, P01, valid, 30]
Line 5
Line 6
Line 7
Do you want to search again ? (Yes/No)
STATUS from MASTER NODE for downloaded file ajax.txt : Proper version
STATUS from MASTER NODE for downloaded file ajax.txt : Proper version
STATUS from MASTER NODE for downloaded file ajax.txt : Proper version
STATUS from MASTER NODE for downloaded file ajax.txt : Proper version
STATUS from MASTER NODE for downloaded file ajax.txt : Proper version
```



16. Meanwhile at their respective Super Peers, Index has been updated and invalidated at super peer as well.

```

Select C:\WINDOWS\system32\cmd.exe
DIC_17092018.txt => [[DIC_17092018.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Master_Copy, SP01, MC, v01, valid, 2018.11.02.13.44.58, 30, P02]]
Category~User_de_e7ec.txt => [[Category~User_de_e7ec.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.13.44.53, 30, P01]]
Category~User_n1_n_e104.txt => [[Category~User_n1_n_e104.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Master_Copy, SP01, MC, v01, valid, 2018.11.02.13.44.58, 30, P02]]
ajax.txt => [[ajax.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v02, valid, 2018.11.02.14.02.54, 30, P01], [ajax.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Cache_Copy, SP01, CC, v01, invalid, 2018.11.02.13.44.53, 30, P01]]
Feed.txt => [[Feed.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Master_Copy, SP01, MC, v01, valid, 2018.11.02.13.44.58, 30, P02]]
Category~User_fr-1_d449.txt => [[Category~User_fr-1_d449.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.13.44.53, 30, P01]]

Select C:\WINDOWS\system32\cmd.exe
User~Korg_ff2d.txt => [[User~Korg_ff2d.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.13.45.04, 30, P05]]
User~EdmundEzekielMahmudIsa_fe9e.txt => [[User~EdmundEzekielMahmudIsa_fe9e.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.13.45.04, 30, P05]]
User~EDUCA33E_2e3c.txt => [[User~EDUCA33E_2e3c.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.13.45.04, 30, P05]]
ajax.txt => [[ajax.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Cache_Copy, SP02, CC, v01, invalid, 2018.11.02.13.44.53, 30, P01]]
User~Korg_ff2d.txt => [[User~Korg_ff2d.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.13.45.04, 30, P05]]
User~Aurevilly_fc9e.txt => [[User~Aurevilly_fc9e.txt, P05, 4005, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer5\Master_Copy, SP02, MC, v01, valid, 2018.11.02.13.45.04, 30, P05]]
P07:0 => [P07:0, 18, SP03, 5003]
P02:0 => [P02:0, 18, SP01, 5001]
P05:0 => [P05:0, 19, P05, 4005]

Select C:\WINDOWS\system32\cmd.exe
valid, 2018.11.02.13.45.09, 30, P07]]
75_clan_7.txt => [[75_clan_7.txt, P07, 4007, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Master_Copy, SP03, MC, v01, valid, 2018.11.02.13.45.09, 30, P07]]
ajax_7.txt => [[ajax_7.txt, P07, 4007, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Master_Copy, SP03, MC, v01, valid, 2018.11.02.13.45.09, 30, P07]]
ajax.txt => [[ajax.txt, P07, 4007, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Cache_Copy, SP03, CC, v01, invalid, 2018.11.02.13.44.53, 30, P01]]
ajaxsearch_7.txt => [[ajaxsearch_7.txt, P07, 4007, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer7\Master_Copy, SP03, MC, v01, valid, 2018.11.02.13.45.09, 30, P07]]
P07:0 => [P07:0, 18, SP01, 4007]
P02:0 => [P02:0, 18, SP01, 5001]
P05:0 => [P05:0, 18, SP02, 5002]
P10:1 => [P10:1, 18, SP04, 5004]
P10:0 => [P10:0, 18, SP04, 5004]
Calling Super Peer Caller

Select C:\WINDOWS\system32\cmd.exe
quickbar-right_10.txt => [[quickbar-right_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.13.45.13, 30, P10]]
shared_10.txt => [[shared_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.13.45.14, 30, P10]]
protect_10.txt => [[protect_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.13.45.13, 30, P10]]
ajax.txt => [[ajax.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Cache_Copy, SP04, CC, v02, valid, 2018.11.02.14.02.54, 30, P01]]
preview_10.txt => [[preview_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.13.45.13, 30, P10]]
Special-Categories_10id_10.txt => [[Special-Categories_10id_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.13.45.14, 30, P10]]
Rob_Spurr_7000_10.txt => [[Rob_Spurr_7000_10.txt, P10, 4010, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer10\Master_Copy, SP04, MC, v01, valid, 2018.11.02.13.45.14, 30, P10]]

```

## PULL VERSION (Super Peer)

17. Leaf Node 6, Leaf Node 8, and Leaf Node 12 wants to Search and download a file named “ajax.txt” from Leaf Node 1 and update their cached table. After downloading, they will start polling Leaf node 1 (master node)

```

C:\WINDOWS\system32\cmd.exe
*****
Peer is now Running. Please configure your setting.
*****
Enter Peer ID
P01
Peer is up and Running.
Registering details of File name 75_clan.txt in Indexing Server
Registering details of File name ajax.txt in Indexing Server
Registering details of File name ajaxsearch.txt in Indexing Server
Registering details of File name ajaxwatch.txt in Indexing Server
Registering details of File name arrow_first.txt in Indexing Server
Registering details of File name arrow_left.txt in Indexing Server
Registering details of File name Category~User_de_e7ec.txt in Indexing Server
Registering details of File name Category~User_fr-1_d449.txt in Indexing Server
Registering details of File name Category~User_fr_fff4.txt in Indexing Server
Registering details of File name Category~User_n1_e3e1.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)

C:\WINDOWS\system32\cmd.exe
VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy

*****
Enter Peer ID you wish to take the file from
P01
2602
File Downloading Successful.
Display File arrow_left.txt
Updated Cached Table Entry after insertion (File download)
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer6\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
NO
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)

C:\WINDOWS\system32\cmd.exe
Master Copy
VALID Peer providing the file with Peer ID is P06 under Super Peer :SP02 which is a Master Copy
VALID Peer providing the file with Peer ID is P12 under Super Peer :SP04 which is a Master Copy

*****
Enter Peer ID you wish to take the file from
P12
2602
File Downloading Successful.
Display File arrow_left.txt
Updated Cached Table Entry after insertion (File download)
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)

C:\WINDOWS\system32\cmd.exe
VALID Peer providing the file with Peer ID is P01 under Super Peer :SP01 which is a Master Copy

*****
Enter Peer ID you wish to take the file from
P01
2602
File Downloading Successful.
Display File arrow_left.txt
Updated Cached Table Entry after insertion (File download)
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer12\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)

```

## 18. Meanwhile in Super Peers

```
C:\WINDOWS\system32\cmd.exe
"Setting the Class path"
"Checking all the configurations before setting up"

Waiting for 3 seconds, press a key to continue ...
"Running the Server..."
Enter the Super Peer ID.
SP01
Server now is up and Running.
*****
THE UPDATED INDEX at 2018/11/02 14:43:22
75_clan.txt => [[75_clan.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.35, 30, P01]]
*****
THE UPDATED INDEX at 2018/11/02 14:43:22
75_clan.txt => [[75_clan.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.35, 30, P01]]
ajax.txt => [[ajax.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.35, 30, P01]]

C:\WINDOWS\system32\cmd.exe
^ - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer6\Master_Copy, SP02, MC, v01, valid, 2018.11.02.14.43.45, 30, P06]]
*****
Line 5
Line 6
Line 7
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
P08:0 => [P08:0, 18, SP03, 5003]
P06:0 => [P06:0, 19, P06, 4006]
P12:0 => [P12:0, 18, SP04, 5004]
Calling Super Peer Caller
WORKING IN ALL TO ALL TOPOLOGY
No Need of broadcasting query messages to all Super Peers.
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version

C:\WINDOWS\system32\cmd.exe
4.43.48, 30, P08]]
DIC 22082018.8.txt => [[DIC 22082018.8.txt, P08, 4008, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Master_Copy, SP03, MC, v01, valid, 2018.11.02.14.43.48, 30, P08]]
M 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Master_Copy, SP03, MC, v01, valid, 2018.11.02.14.43.48, 30, P08]]
DIC 27082018.8.txt => [[DIC 27082018.8.txt, P08, 4008, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Master_Copy, SP03, MC, v01, valid, 2018.11.02.14.43.48, 30, P08]]
diff 8.txt => [[diff 8.txt, P08, 4008, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Master_Copy, SP03, MC, v01, valid, 2018.11.02.14.43.48, 30, P08]]
*****
Line 5
Line 6
Line 7
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version

C:\WINDOWS\system32\cmd.exe
^ valid, 2018.11.02.14.43.54, 30, P12]]
*****
Line 5
Line 6
Line 7
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
P08:0 => [P08:0, 18, SP03, 5003]
P06:0 => [P06:0, 18, SP02, 5002]
P12:0 => [P12:0, 19, P12, 4012]
Calling Super Peer Caller
WORKING IN ALL TO ALL TOPOLOGY
No Need of broadcasting query messages to all Super Peers.
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
```

## 19. Invalidation notification at Leaf Node 6, Leaf Node 8, and Leaf Node 12 from their respective Super Peers.

```
C:\WINDOWS\system32\cmd.exe
Registering details of File name ajax.txt in Indexing Server
Registering details of File name ajaxsearch.txt in Indexing Server
Registering details of File name ajaxwatch.txt in Indexing Server
Registering details of File name arrow_first.txt in Indexing Server
Registering details of File name arrow_left.txt in Indexing Server
Registering details of File name Category-User_de_e7ec.txt in Indexing Server
Registering details of File name Category-User_fr-1_d4d9.txt in Indexing Server
Registering details of File name Category-User_fr_ff4.txt in Indexing Server
Registering details of File name Category-User_nl_e3e1.txt in Indexing Server
Do you want to Search a File, Delete File, Edit file or Exit? (Search/Delete/Edit/Exit)
Edit
Enter the file name which you want to Edit(Append)
arrow_left.txt
Enter anything you want to append in this file
This is Pull version? demo
File edited Successfully.
New Version Number for edited file : v02
Do you want to edit more files? (Yes/No)

C:\WINDOWS\system32\cmd.exe
^ Master Copy
*****
Enter Peer ID you wish to take the file from
P01
2602
File Downloading Successful.
Display File arrow_left.txt
Updated Cached Table Entry after insertion (File download)
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer6\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)
Received notification from Super Peer to invalidate the file.arrow_left.txt
Updated Cached Table Entry after Invalidation from Pull
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer6\Cache_Copy, v01, P01, invalid, 30]

C:\WINDOWS\system32\cmd.exe
Cached Copy
*****
Enter Peer ID you wish to take the file from
P12
2602
File Downloading Successful.
Display File arrow_left.txt
Updated Cached Table Entry after insertion (File download)
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)
Received notification from Super Peer to invalidate the file.arrow_left.txt
Updated Cached Table Entry after Invalidation from Pull
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Cache_Copy, v01, P01, invalid, 30]

C:\WINDOWS\system32\cmd.exe
^ Master Copy
*****
Enter Peer ID you wish to take the file from
P01
2602
File Downloading Successful.
Display File arrow_left.txt
Updated Cached Table Entry after insertion (File download)
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer12\Cache_Copy, v01, P01, valid, 30]
Do you want to search again ? (Yes/No)
No
Do you want to Search a File, Delete File or Exit? (Search/Delete/Exit)
Received notification from Super Peer to invalidate the file.arrow_left.txt
Updated Cached Table Entry after Invalidation from Pull
arrow_left.txt => [arrow_left.txt, CC, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer12\Cache_Copy, v01, P01, invalid, 30]
```



## 20. Invalidation at Super Peer2, Super Peer 3 and Super Peer 4.

```
Select C:\WINDOWS\system32\cmd.exe
D:\27882018.txt -> [[D:\27882018.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.39, 30, P02]]
commonPrint.txt -> [[commonPrint.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.39, 30, P02]]
ajaxwatch.txt -> [[ajaxwatch.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.35, 30, P01]]
cologneblue.txt -> [[cologneblue.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.39, 30, P02]]
arrow first.txt -> [[arrow first.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.35, 30, P01]]
arrow_left.txt -> [[arrow_left.txt, P01, 4001, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer1\Master_Copy, SP01, MC, v02, valid, 2018.11.02.14.52.59, 30, P01]]
D:\22882018.txt -> [[D:\22882018.txt, P02, 4002, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer2\Master_Copy, SP01, MC, v01, valid, 2018.11.02.14.43.35, 30, P01]]

Select C:\WINDOWS\system32\cmd.exe
WORKING IN ALL TO ALL TOPOLOGY
No Need of broadcasting query messages to all Super Peers.
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : File out of Date

BHAI HO GAYA !!!!
Index Server Updated & Specified Record Updated
THE UPDATED INDEX at 2018/11/02 14:43:28
Category-User_n1-n_e104_8.txt -> [[Category-User_n1-n_e104_8.txt, P08, 4008, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Master_Copy, SP03, MC, v01, valid, 2018.11.02.14.43.48, 30, P08]]
cologneblue_8.txt -> [[cologneblue_8.txt, P08, 4008, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Master_Copy, SP03, MC, v01, valid, 2018.11.02.14.43.48, 30, P08]]
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COPYING_8.txt -> [[COPYING_8.txt, P08, 4008, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer8\Master_Copy, SP03, MC, v01, valid, 2018.11.02.14.43.48, 30, P08]]

Select C:\WINDOWS\system32\cmd.exe
WORKING IN ALL TO ALL TOPOLOGY
No Need of broadcasting query messages to all Super Peers.
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : Proper version
STATUS from MASTER SUPER PEER for downloaded file arrow_left.txt : File out of Date

BHAI HO GAYA !!!!
Index Server Updated & Specified Record Updated
THE UPDATED INDEX at 2018/11/02 14:43:31
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Category-User_fr_1_d449_12.txt -> [[Category-User_fr_1_d449_12.txt, P12, 4012, K:\IIT Life\Lecture Notes\SEM 1 - DIC AOS DPA\AOS\Homework-Programming\PA-3\Eval_Peer12\Master_Copy, SP04, MC, v01, valid, 2018.11.02.14.43.54, 30, P12]]
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END