## **PROJECT TITLE:**

Napster-style Peer-To-Peer File Sharing System

**Output File** 

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**Subj: CS-550 Advanced Operating Systems** 

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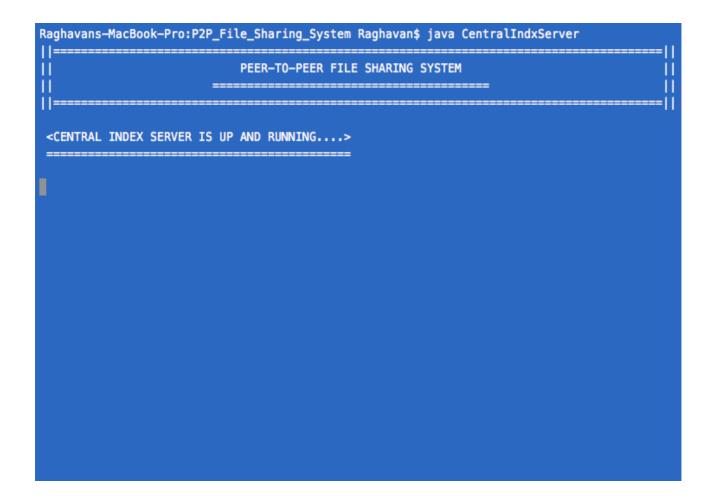
# Project Title: Napster-Style Peer-to-Peer File Sharing System OUTPUT FILE:

## **Step-by-Step Execution:**

On Machine-A, CentralIndxServer is Run.

The CIS starts listening for incoming connections from the Peers.

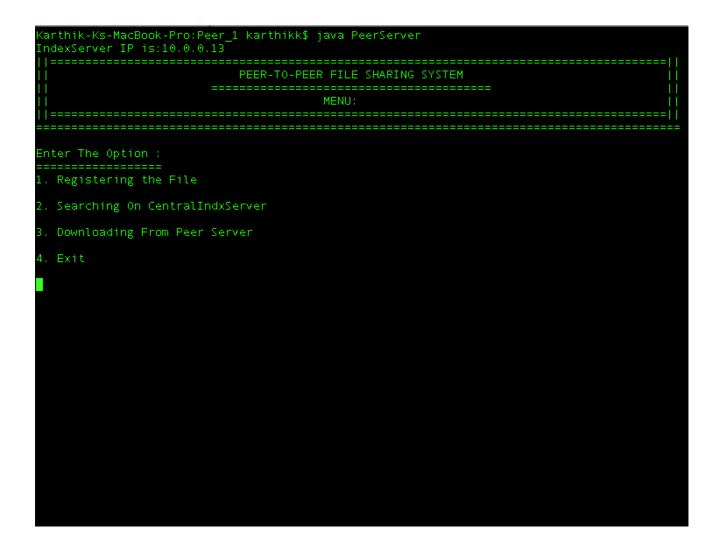
Screenshot when CentralIndxServer is Running:



On Machine-B, Peer\_1 is Run.

Peer\_1 is allowed to Register its files with the CentralIndxServer, Search the CIS for required files or Download from other peers.

Screenshot when Peer\_1 is Run:



## **Registration Process:**

## Peer\_1:

Peer\_1 is Registering the File "testfile.txt" with the CentralIndxServer.

Screenshot when Peer\_1 Registers the file on the CentralIndxServer:

## **CentralIndxServer:**

Register Request received on the CentralIndxServer from Peer\_1 and the CIS registers the filename and the ID in the Index Catalogue.

Screenshot for Register Request from Peer\_1 on the IndexServer:

## **Search Process:**

#### Peer\_2:

On Machine-C, Peer\_2 is Run.

Peer\_2 is allowed to Register its files with the CentralIndxServer, Search the CIS for required files or Download from other peers.

Peer\_2 issues a Search Request for the file "testfile.txt" which was registered by Peer\_1

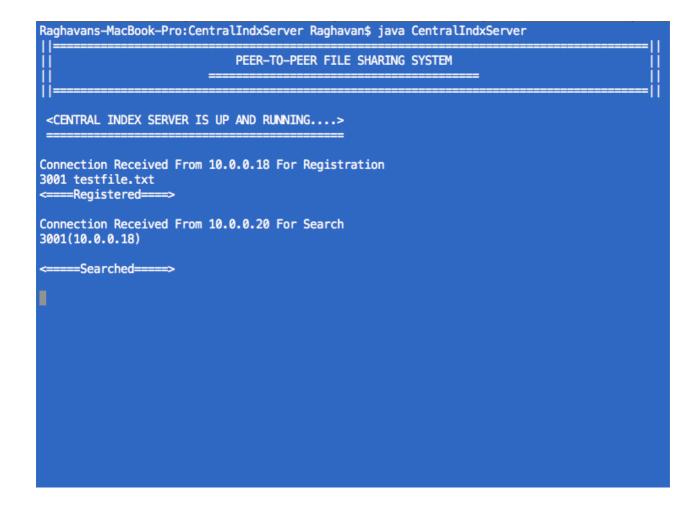
The Search result returned will be the Peer ID of the peer and the IP Address of the Peer which contains the file.

Screenshot for the Search Result returned from the CentralIndxServer for the file "testfile.txt":

## **CentralIndxServer:**

Search Request received on the CentralIndxServer from Peer\_2 and the CIS Searches the Filename in the Index Catalogue.

Screenshot for Search Request from Peer\_2 on the IndexServer:



## **Download Process:**

#### **Peer\_3:**

On Machine-D, Peer\_3 is Run.

Peer\_3 is allowed to Register its files with the CentralIndxServer, Search the CIS for required files or Download from other peers.

Peer\_3 issues a Search Request for the file "testfile.txt" which was registered by Peer\_1

The Search result returned will be the Peer ID of the peer and the IP Address of the Peer which contains the file.

Then It issues a Download Request for the file "testfile.txt" which was registered by Peer\_1

Screenshot for the Search Result returned from the CentralIndxServer for the file

"testfile.txt"

Screenshot: Download Request from Peer\_3 to Peer\_1 for downloading the File "testfile.txt"

Screenshot: Peer\_3 Downloads the File "testfile.txt" from Peer\_1