Programming Project 4

CS5352 Advanced Operating Systems Design
Spring 2017

How to Run the Project

Run the GnutellaNetwork.jar and pass 3 arguments

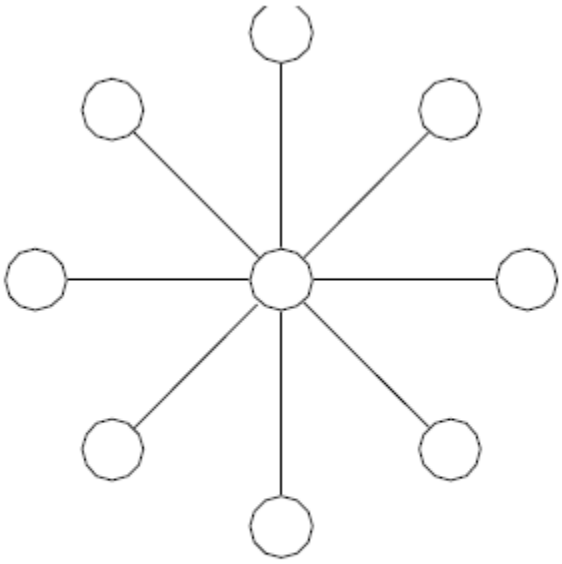
- Argument 1 Configuration file name
- Argument 2 Peer ID
- Argument 3 Peer's shared directory

For example, Java -jar GnutellaNetwork.jar meshtopology.txt 9 " Java -jar GnutellaNetwork.jar meshtopology.txt 1 "D:\TTU\Spring 2016\AOS\Project 4\Code\Peer1""

To start another peer

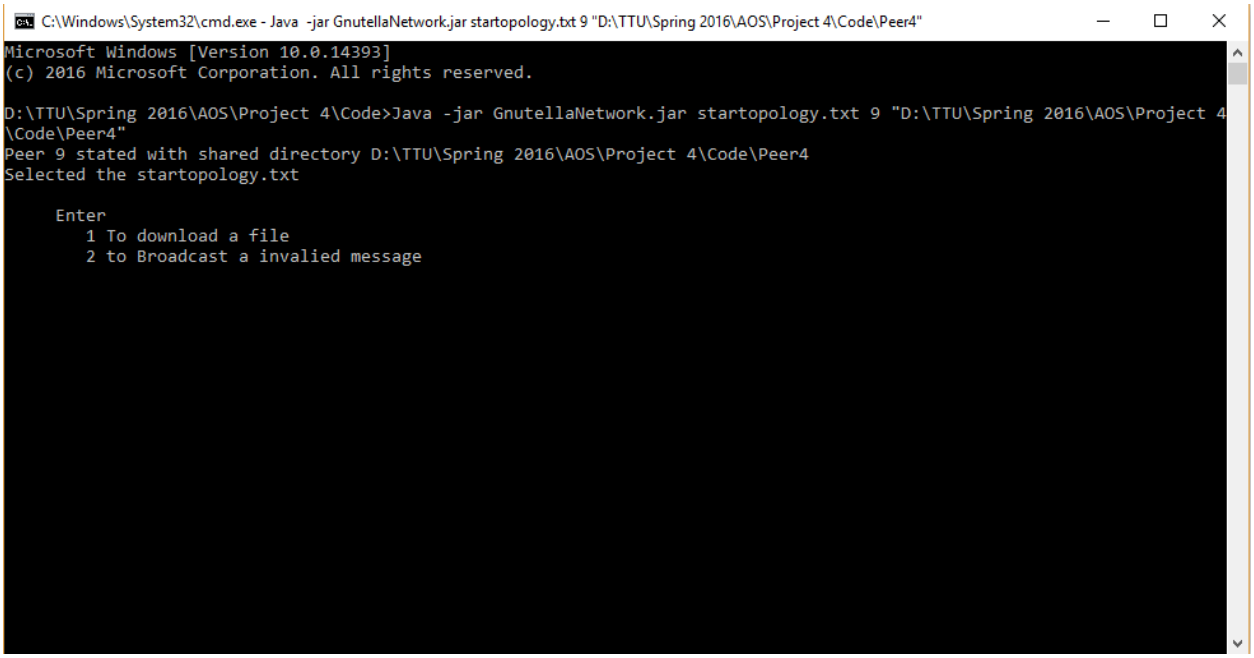
Open start another peer open command prompt and follow above instructions.

Star Topology

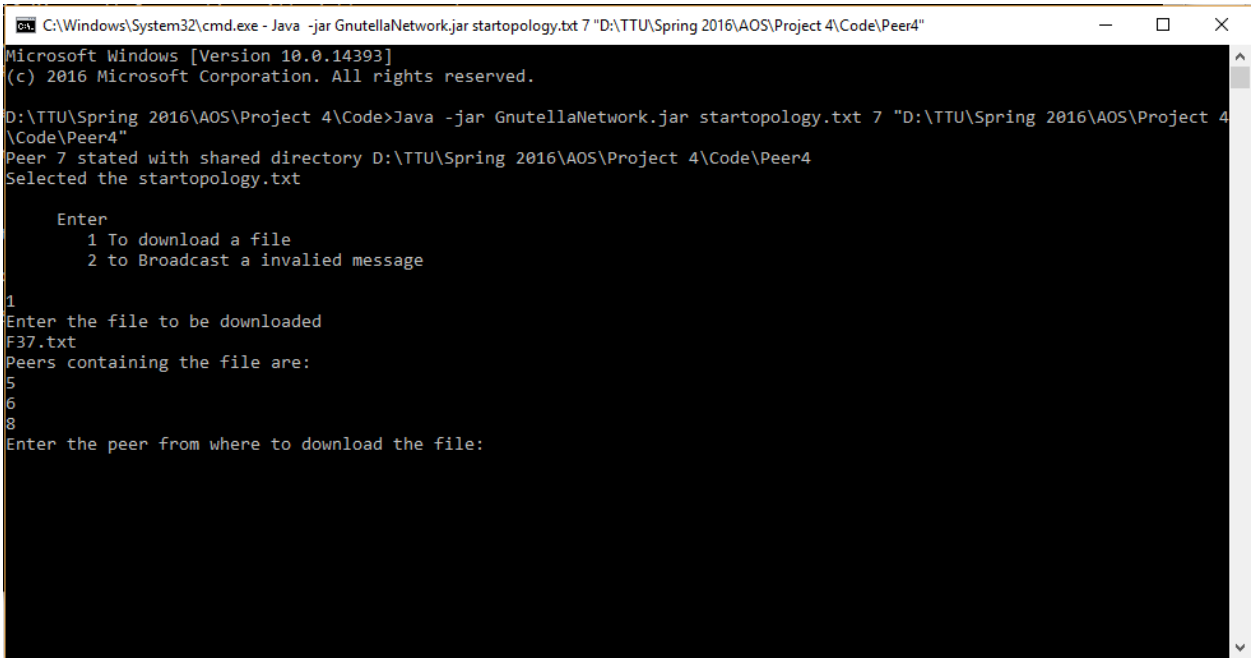


Star Topology

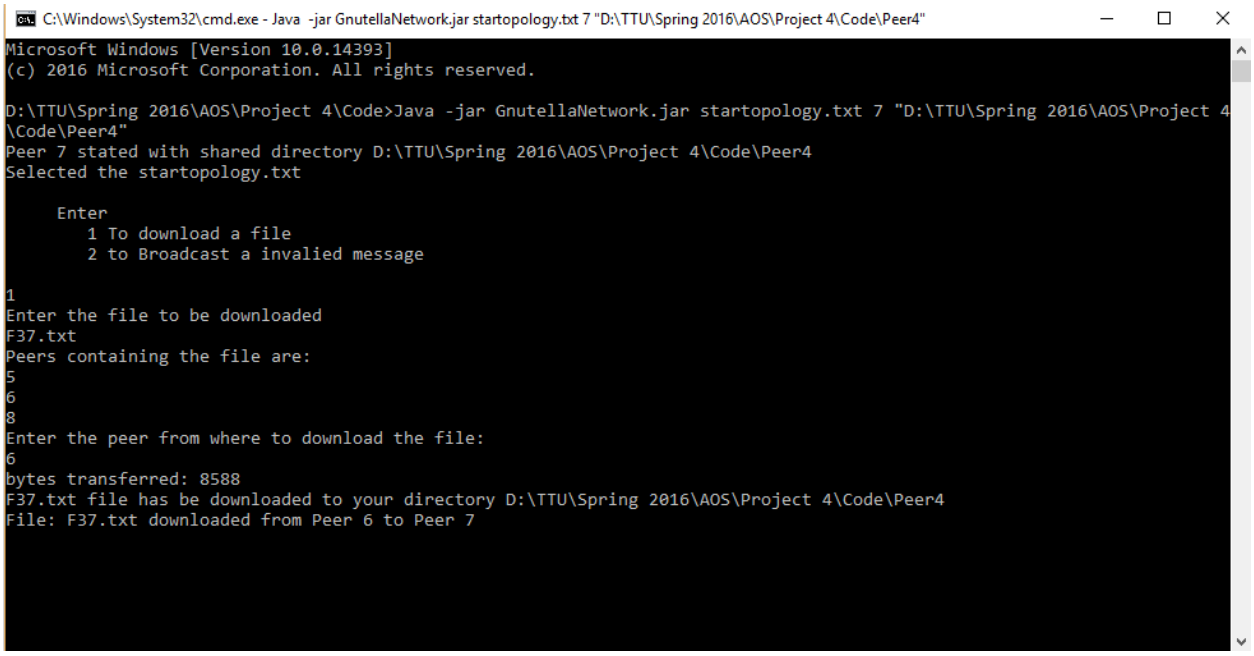
Start 9 peers with their shared directory



Select 1 for Search and download the file and enter the file name

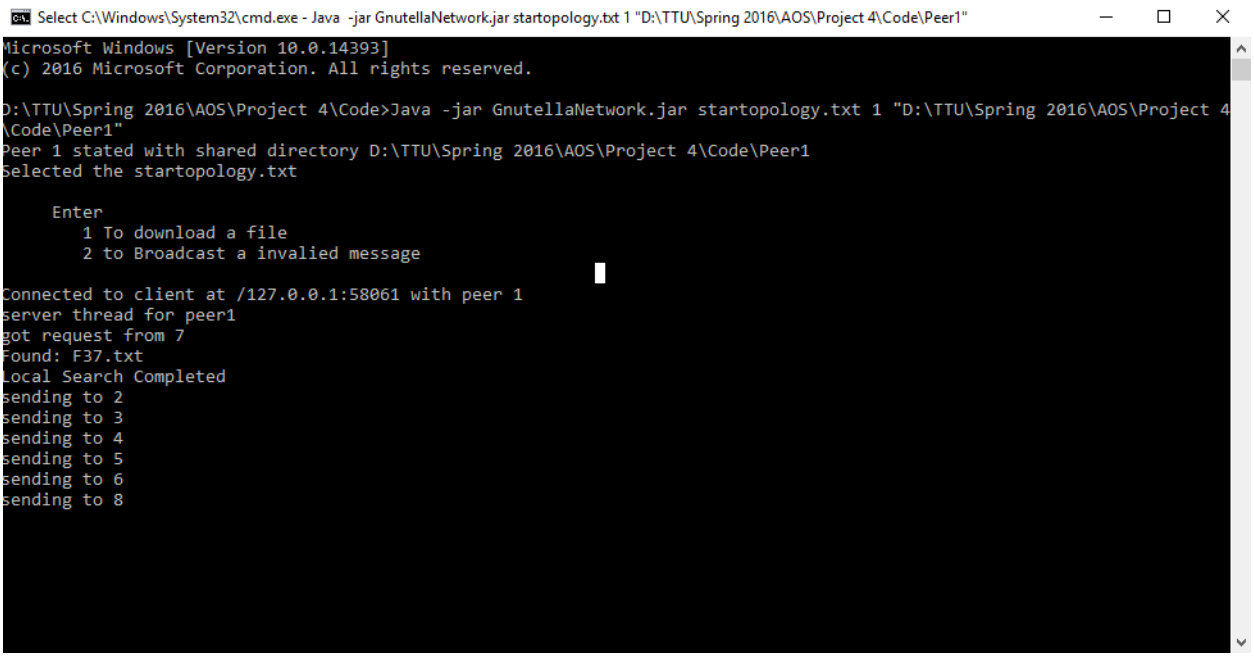


Select the peers from the list

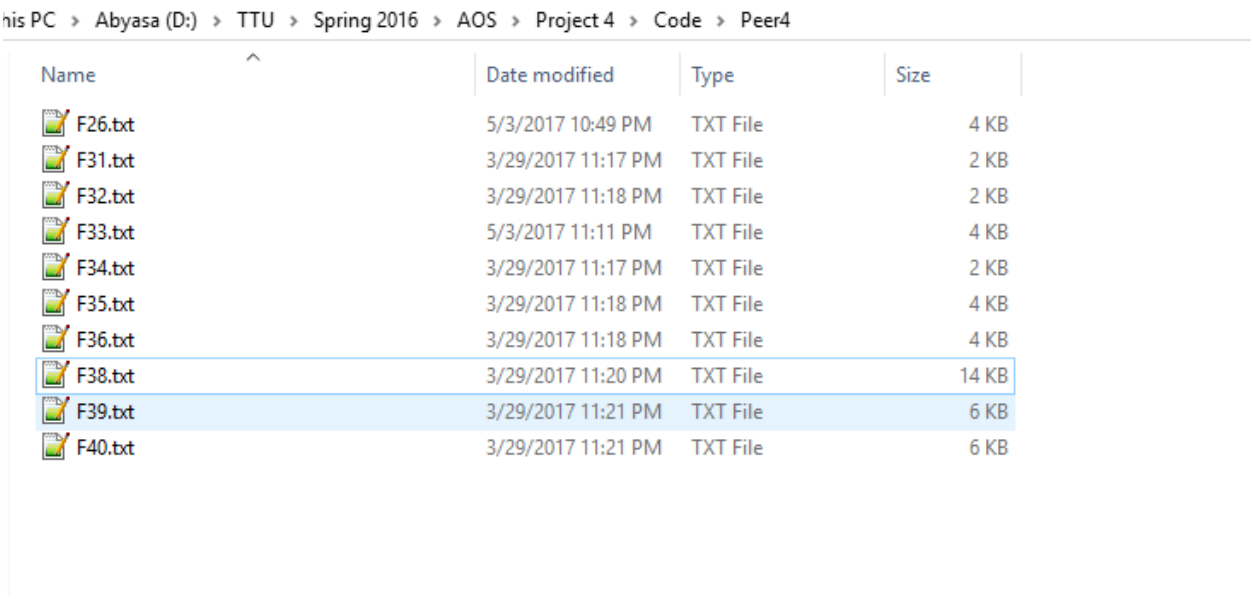


File is downloaded to the peer's shared directory

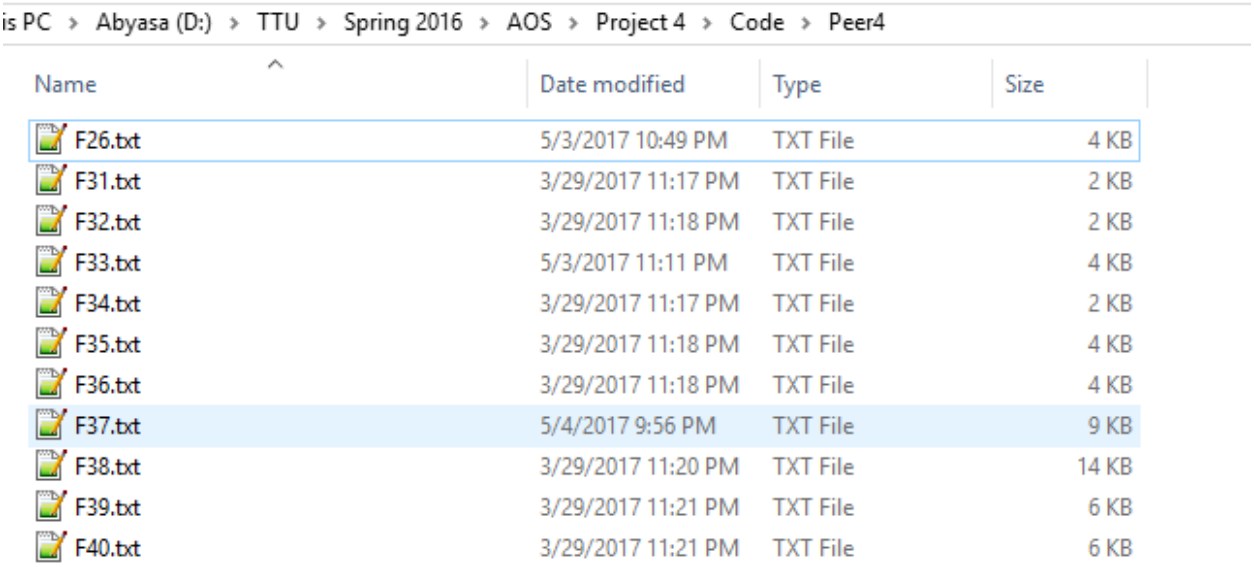
Peers forwarding request to its neighbors



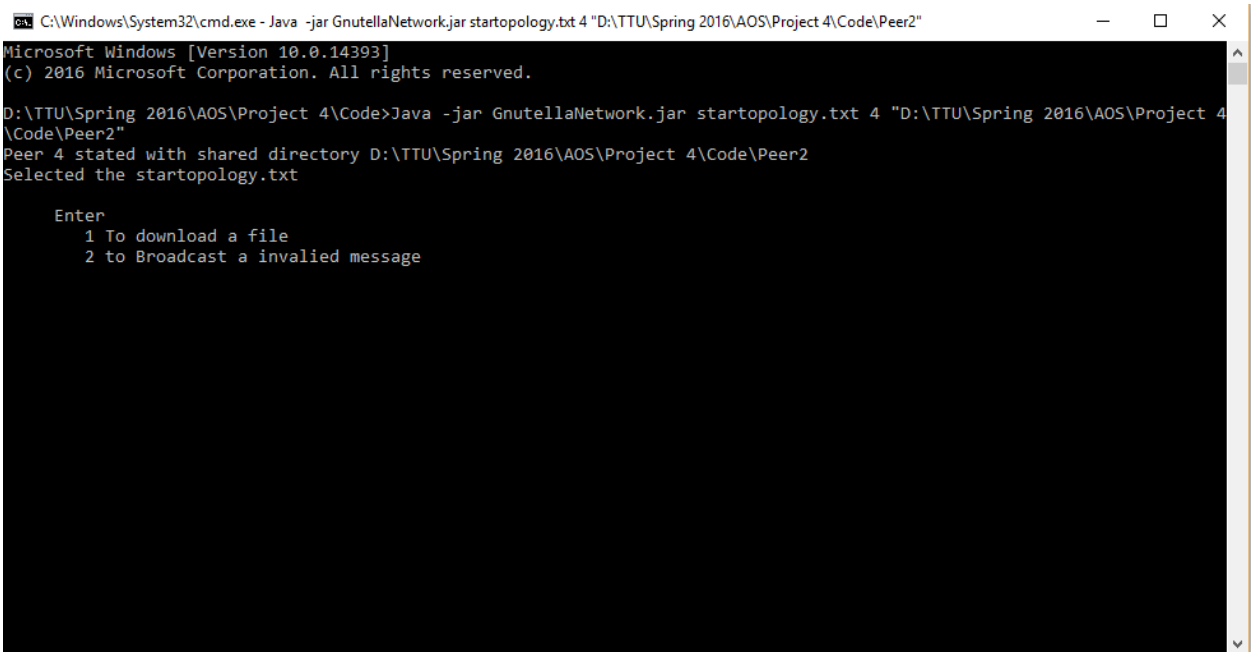
Peer 7 shared directory before downloading file



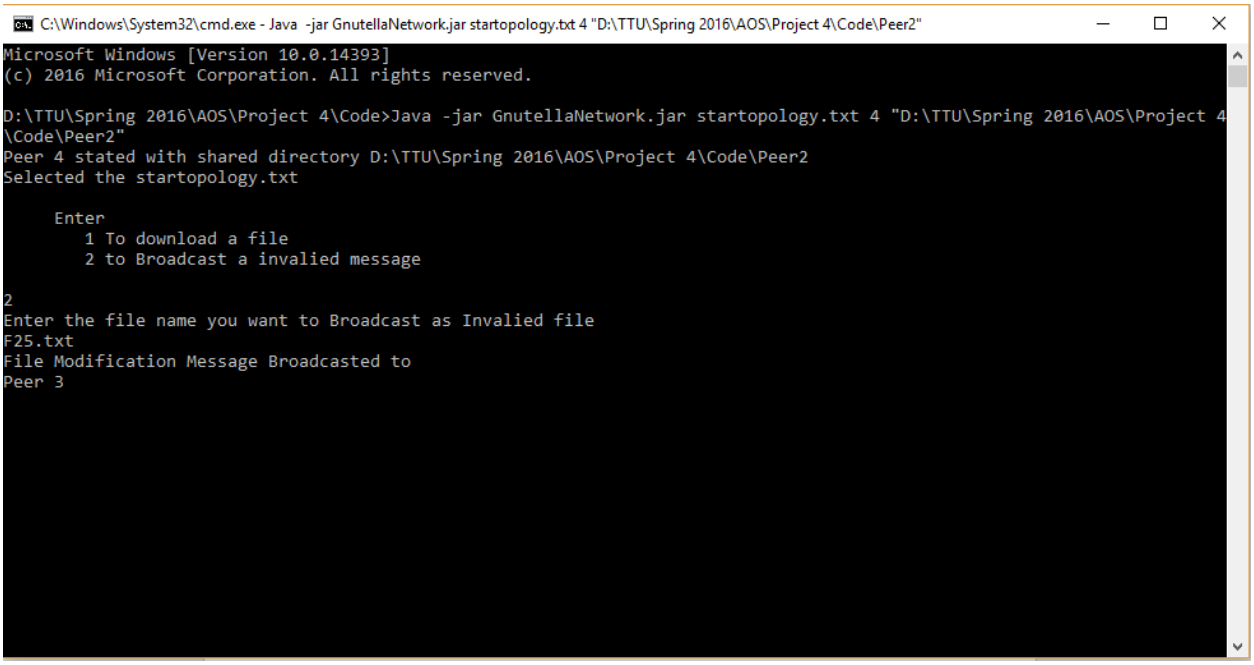
Peer 7 shared directory after downloading file



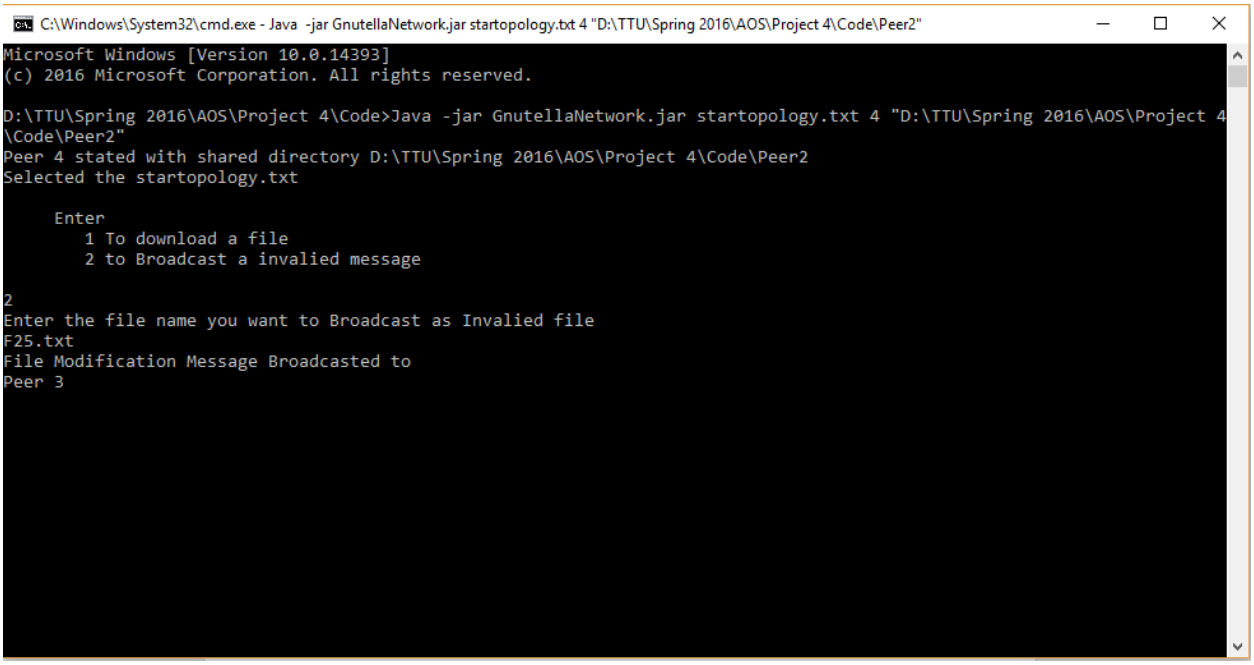
PUSH the file modification message.



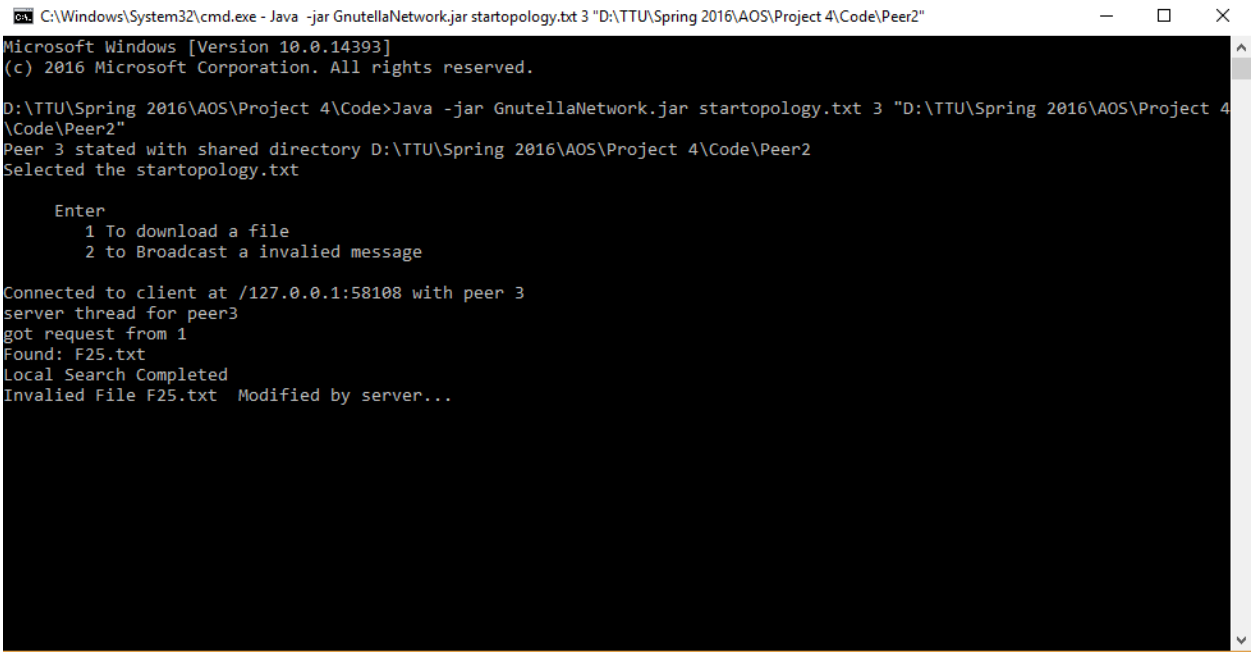
Select option 2 and enter the file name



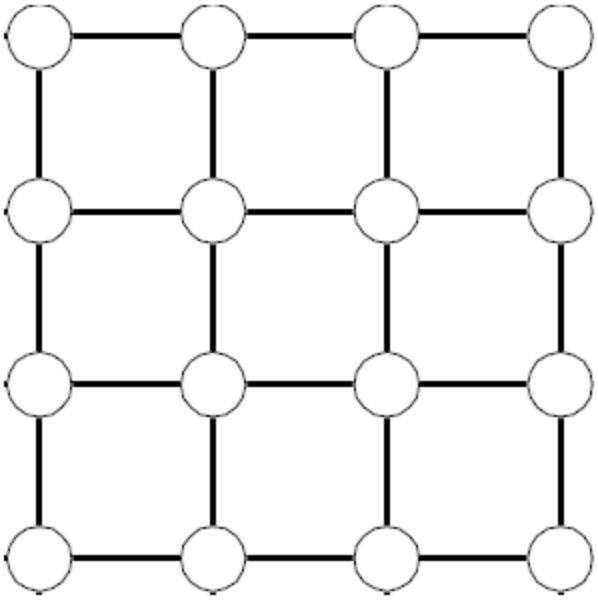
Only peer 3 has the given file



Peer 3 received the Invalidation message

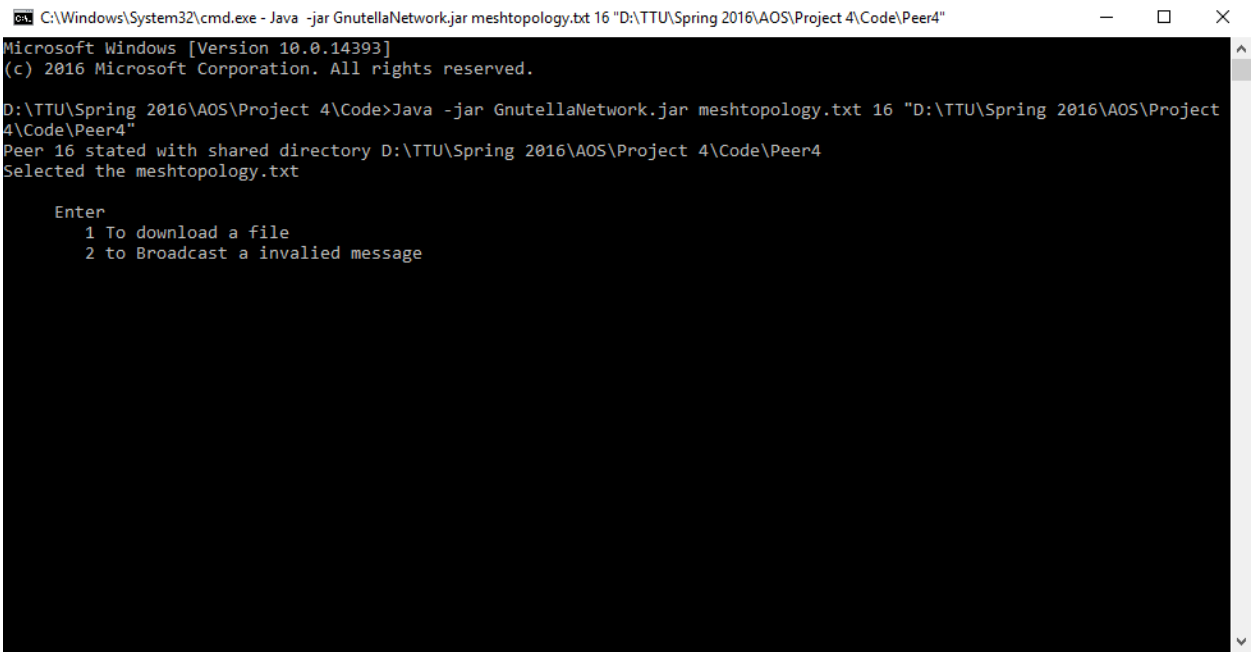


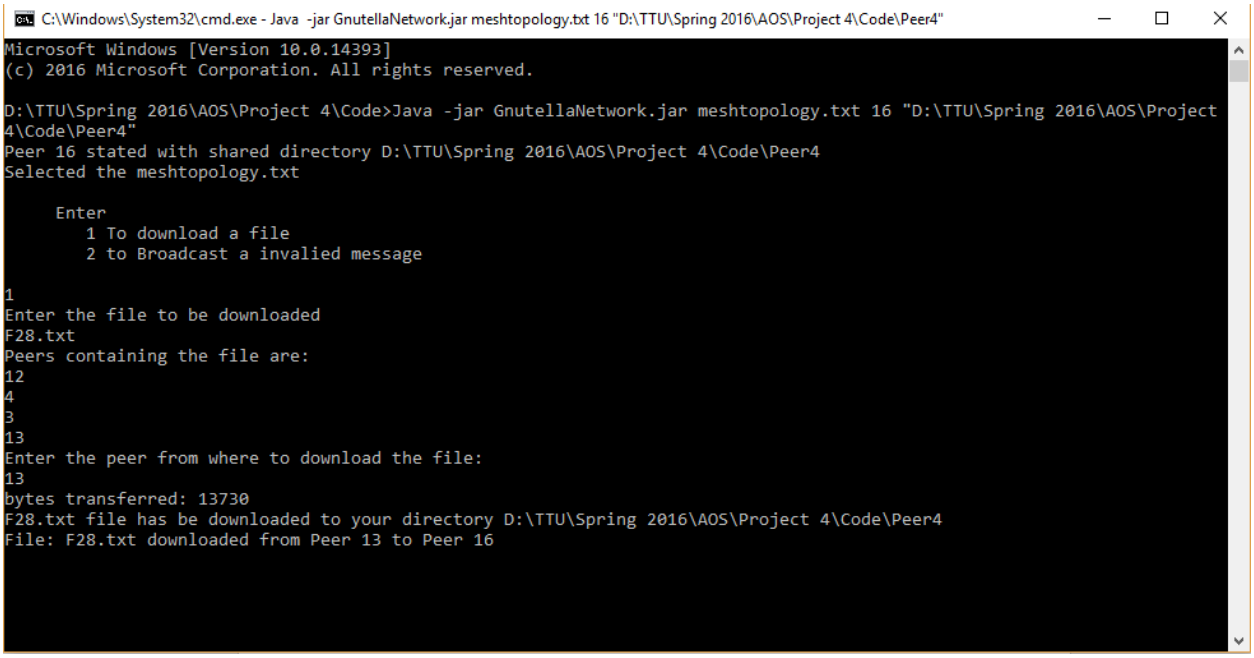
2D Mesh Topology



2D-mesh Topology

Start 16 peers with their shared directory




C:\Windows\System32\cmd.exe - Java -jar GnutellaNetwork.jar meshtopology.txt 16 "D:\TTU\Spring 2016\AOS\Project 4\Code\Peer4"
Microsoft Windows [Version 10.0.14393]
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D:\TTU\Spring 2016\AOS\Project 4\Code>Java -jar GnutellaNetwork.jar meshtopology.txt 16 "D:\TTU\Spring 2016\AOS\Project 4\Code\Peer4"
Peer 16 stated with shared directory D:\TTU\Spring 2016\AOS\Project 4\Code\Peer4
Selected the meshtopology.txt
Enter
1 To download a file
2 to Broadcast a invalied message
1
Enter the file to be downloaded
F28.txt
Peers containing the file are:
12
4
3
13
Enter the peer from where to download the file:
13
bytes transferred: 13730
F28.txt file has be downloaded to your directory D:\TTU\Spring 2016\AOS\Project 4\Code\Peer4
File: F28.txt downloaded from Peer 13 to Peer 16