

Steps to run –

1. Open 3 different command prompts, got to the location of project as told below.
2. Firstly, go to location of directory b and run server_b.py
3. After that open second command prompt go to location of directory a and run server_a.py
4. Finally using third command prompt go to location where client.py is located and run it using typing client.py
5. Changes can be made any time to directories.
6. User can lock files by typing “lock n”, Where n = index number.
7. Changes made to locked file are queued. Other files are in sync
8. To unlock type “unlock n”, Where n = index number.

Output –

```
Command Prompt - client.py
4 tp.txt 0 Sun Dec 5 19:46:31 2021
Please enter the input: lock 4
File locked is - tp.txt
Welcome to the server!!
1 aditya.txt 0 Sun Dec 5 19:46:26 2021
2 server_a.py 10958 Sun Dec 5 19:29:16 2021
3 server_b.py 3192 Sun Dec 5 13:17:26 2021
4 tp.txt 0 Sun Dec 5 19:46:31 2021 Locked
Please enter the input: lock 1
File locked is - aditya.txt
Welcome to the server!!
1 aditya.txt 0 Sun Dec 5 19:46:26 2021 Locked
2 server_a.py 10958 Sun Dec 5 19:29:16 2021
3 server_b.py 3192 Sun Dec 5 13:17:26 2021
4 tp.txt 0 Sun Dec 5 19:46:31 2021 Locked
Please enter the input: unlock 4
File unlocked is - tp.txt
Welcome to the server!!
1 aditya.txt 0 Sun Dec 5 19:46:26 2021 Locked
2 server_a.py 10958 Sun Dec 5 19:29:16 2021
3 server_b.py 3192 Sun Dec 5 13:17:26 2021
4 tp.txt 0 Sun Dec 5 19:46:31 2021
Please enter the input: unlock 1
File unlocked is - aditya.txt
Welcome to the server!!
1 aditya.txt 0 Sun Dec 5 19:46:26 2021
2 server_a.py 10958 Sun Dec 5 19:29:16 2021
3 server_b.py 3192 Sun Dec 5 13:17:26 2021
4 tp.txt 0 Sun Dec 5 19:46:31 2021
Please enter the input: █
```

```
Command Prompt - server_a.py
Microsoft Windows [Version 10.0.22000.348]
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C:\Users\adity>cd C:\Users\adity\OneDrive\Desktop\submit
C:\Users\adity\OneDrive\Desktop\submit>cd directory_a
C:\Users\adity\OneDrive\Desktop\submit\directory_a>server_a.py
Welcome to the server2!
server_a.py 18950 bytes Sun Dec 5 19:29:16 2021
aditya.txt 0 bytes Sun Dec 5 19:46:15 2021
tp.txt 0 bytes Sun Dec 5 19:46:19 2021
Added: server_b.py
connected by ('10.199.144.217', 60907)

tp.txt Locked
connected by ('10.199.144.217', 60908)

aditya.txt Locked
connected by ('10.199.144.217', 60909)

tp.txt Unlocked
connected by ('10.199.144.217', 60910)

aditya.txt Unlocked
connected by ('10.199.144.217', 60911)
```

```
Command Prompt - server_b.py
Microsoft Windows [Version 10.0.22000.348]
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C:\Users\adity>cd C:\Users\adity\OneDrive\Desktop\submit
C:\Users\adity\OneDrive\Desktop\submit>cd directory_b
C:\Users\adity\OneDrive\Desktop\submit\directory_b>server_b.py
connected by ('10.199.144.217', 60903)
server_b.py 3192 bytes Sun Dec 5 13:17:26 2021
aditya.txt 0 bytes Sun Dec 5 19:46:26 2021
tp.txt 0 bytes Sun Dec 5 19:46:31 2021
Added: server_a.py
```