

## IndexServer - output

Vishants-MacBook-Pro:Downloads vishantbhole\$ python3 IndexServer.py

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51086', '.DS\_Store')

{'onekb.txt': {'localhost|peer1|1035'}, '.DS\_Store': {'localhost|peer1|9036'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51087', 'tenkb.txt')

{'onekb.txt': {'localhost|peer1|1035'}, '.DS\_Store': {'localhost|peer1|9036'}, 'tenkb.txt': {'localhost|peer1|9036'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51088', 'onekb.txt')

{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer1|1035'}, '.DS\_Store': {'localhost|peer1|9036'}, 'tenkb.txt': {'localhost|peer1|9036'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51089', 'twentykb.txt')

{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer1|1035'}, '.DS\_Store': {'localhost|peer1|9036'}, 'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51090', 'thirtykb.txt')

{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer1|1035'}, '.DS\_Store': {'localhost|peer1|9036'}, 'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'}, 'thirtykb.txt': {'localhost|peer2|9037'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51091', '.DS\_Store')

{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer1|1035'}, '.DS\_Store': {'localhost|peer2|9037', 'localhost|peer1|9036'}, 'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'}, 'thirtykb.txt': {'localhost|peer2|9037'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51092', 'onekb.txt')

{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer2|9037', 'localhost|peer1|1035'}, '.DS\_Store': {'localhost|peer2|9037', 'localhost|peer1|9036'}, 'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'}, 'thirtykb.txt': {'localhost|peer2|9037'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51093', 'sixtykb.txt')  
{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer2|9037', 'localhost|peer1|1035'},  
'DS\_Store': {'localhost|peer2|9037', 'localhost|peer1|9036'}, 'tenkb.txt':  
{'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'}, 'thirtykb.txt':  
{'localhost|peer2|9037'}, 'sixtykb.txt': {'localhost|peer3|9038'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51094', '.DS\_Store')  
{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer2|9037', 'localhost|peer1|1035'},  
'DS\_Store': {'localhost|peer3|9038', 'localhost|peer2|9037', 'localhost|peer1|9036'},  
'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'}, 'thirtykb.txt':  
{'localhost|peer2|9037'}, 'sixtykb.txt': {'localhost|peer3|9038'}}

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51095', 'fiftykb.txt')  
{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer2|9037', 'localhost|peer1|1035'},  
'DS\_Store': {'localhost|peer3|9038', 'localhost|peer2|9037', 'localhost|peer1|9036'},  
'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'}, 'thirtykb.txt':  
{'localhost|peer2|9037'}, 'sixtykb.txt': {'localhost|peer3|9038'}, 'fiftykb.txt':  
{'localhost|peer3|9038'}}

Waiting patiently for search queries

Sent search result to - ('127.0.0.1', '51150', 'twentykb.py', 'notfound')

Waiting patiently for search queries

Sent search result to - ('127.0.0.1', '51151', 'twentykb.txt', 'localhost|peer2|9037')

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51153', 'twentykb.txt')  
{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer2|9037', 'localhost|peer1|1035'},  
'DS\_Store': {'localhost|peer3|9038', 'localhost|peer2|9037', 'localhost|peer1|9036'},  
'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'},  
'localhost|peer1|9036'}, 'thirtykb.txt': {'localhost|peer2|9037'}, 'sixtykb.txt':  
{'localhost|peer3|9038'}, 'fiftykb.txt': {'localhost|peer3|9038'}}

Waiting patiently for search queries

Sent search result to - ('127.0.0.1', '51170', 'sixtykb.txt', 'localhost|peer3|9038')

Waiting patiently for search queries

Updated index - ('127.0.0.1', '51172', 'sixtykb.txt')  
{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer2|9037', 'localhost|peer1|1035'},  
'DS\_Store': {'localhost|peer3|9038', 'localhost|peer2|9037', 'localhost|peer1|9036'},  
'tenkb.txt': {'localhost|peer1|9036'}, 'twentykb.txt': {'localhost|peer2|9037'},

'localhost|peer1|9036'}, 'thirtykb.txt': {'localhost|peer2|9037'}, 'sixtykb.txt':  
{'localhost|peer2|9037', 'localhost|peer3|9038'}, 'fiftykb.txt': {'localhost|peer3|9038'}}

Waiting patiently for search queries  
Sent serach result to - ('127.0.0.1', '51178', 'tenkb.py', 'notfound')

Waiting patiently for search queries  
Sent serach result to - ('127.0.0.1', '51179', 'tenkb.txt', 'localhost|peer1|9036')

Waiting patiently for search queries  
Updated index - ('127.0.0.1', '51181', 'tenkb.txt')  
{'onekb.txt': {'localhost|peer1|9036', 'localhost|peer2|9037', 'localhost|peer1|1035'},  
'DS\_Store': {'localhost|peer3|9038', 'localhost|peer2|9037', 'localhost|peer1|9036'},  
'tenkb.txt': {'localhost|peer3|9038', 'localhost|peer1|9036'}, 'twentykb.txt':  
{'localhost|peer2|9037', 'localhost|peer1|9036'}, 'thirtykb.txt': {'localhost|peer2|9037'},  
'sixtykb.txt': {'localhost|peer2|9037', 'localhost|peer3|9038'}, 'fiftykb.txt':  
{'localhost|peer3|9038'}}

Waiting patiently for search queries  
Sent serach result to - ('127.0.0.1', '51206', 'fourtykb.txt', 'notfound')

Waiting patiently for search queries

## Server1 - output

ishants-MacBook-Pro:Downloads vishantbhole\$ python3 ~/Downloads/Peer1.py server peer1  
localhost 9036

Server started. One time ops. Update all files to index server

Index server Updation complete

Waiting patiently for new download requests  
Recieved file request from ('127.0.0.1', 51180)  
New sender started for client - ('127.0.0.1', '51180', './peer1/tenkb.txt')

## Successfully sent - ./peer1/tenkb.txt  
Waiting patiently for new download requests

## Server2 - output

```
Vishants-MacBook-Pro:Downloads vishantbhole$ python3 ~/Downloads/Peer1.py server peer2  
localhost 9037
```

Server started. One time ops. Update all files to index server

Index server Updation complete

Waiting patiently for new download requests

Recieved file request from ('127.0.0.1', 51152)

New sender started for client - ('127.0.0.1', '51152', './peer2/twentykb.txt')

Waiting patiently for new download requests

## Successfully sent - ./peer2/twentykb.txt

## Server3 - output

```
Vishants-MacBook-Pro:Downloads vishantbhole$ python3 ~/Downloads/Peer1.py server peer3  
localhost 9038
```

Server started. One time ops. Update all files to index server

Index server Updation complete

Waiting patiently for new download requests

Recieved file request from ('127.0.0.1', 51171)

New sender started for client - ('127.0.0.1', '51171', './peer3/sixtykb.txt')

Waiting patiently for new download requests

## Successfully sent - ./peer3/sixtykb.txt

## Client1 - output

```
Vishants-MacBook-Pro:Downloads vishantbhole$ python3 ~/Downloads/Peer1.py client peer1  
localhost 9036
```

## Please input file name with extension. Or exit() to close.

twentykb.txt

receiving data...

receiving data...

Successfully received entire file

Client closed connection. Now updating index server

## Please input file name with extension. Or exit() to close.

onekb.txt

onekb.txt Already exists for this peer. No need to download from remote

## Please input file name with extension. Or exit() to close.

## Client2 - output

Vishants-MacBook-Pro:Downloads vishantbhole\$ python3 ~/Downloads/Peer1.py client peer2  
localhost 9037

## Please input file name with extension. Or exit() to close.

sixtykb.txt

receiving data...

receiving data...

Successfully received entire file

Client closed connection. Now updating index server

## Please input file name with extension. Or exit() to close.

fourtykb.txt

Sorry file can not be found in any of the peer

## Please input file name with extension. Or exit() to close.

## Client3 - output

Vishants-MacBook-Pro:Downloads vishantbhole\$ python3 ~/Downloads/Peer1.py client peer3  
localhost 9038

## Please input file name with extension. Or exit() to close.

tenkb.txt

receiving data...

receiving data...

Successfully received entire file

Client closed connection. Now updating index server

## Please input file name with extension. Or exit() to close.