Performance Evaluation

CASE-1(1000 Registrations)

- **When only 1 Peer Registered :**The Total time taken for the registering 1000 files was 6.75 seconds. But when the count was increased to 10000 the time was 100 seconds.Avg time for 1000 will be 0.00675.
- **When 2 Peers Registered Concurrently**: When 2 peers tried registering the file 1000 times(2000 total) the time taken was 12.2 seconds.Avg time will be 0.0066.

- **When 3 Peers Registered Concurrently**: When 3 peers tried registering the file 1000 times(3000 total) the time taken was 20 seconds**.**Here the performance of 1 file registration is 0.006 seconds for 1 operation of 1 peer

  It is observed that as the concurrent registration of Peer increased with the number of peers increasing the time also increased.

CASE-2(1000 lookups)

- **When only 1 Peer looked Up :**The Total time taken for the registering 1ookup was 18.65 seconds.Avg time for 1000 will be 0.01865.

- **When 2 Peers looked Up Concurrently**: When 2 peers tried registering the file 1000 times(2000 total) the time taken was 37.35 seconds.Avg time will be 0.01865.

- **When 3 Peers looked Concurrently**: When 3 peers tried registering the file 1000 times(3000 total) the time taken was 62.23 seconds**.**Here the performance of 1 file lookup is 0.0207 seconds for 1 operation of 1 peer

CASE-3

When only 1 Peer Used

In this case only a sequential request is made by a Peer.It consist of 1 Server and 3 Peers.The Peer (any 1) runs and does the task of registerating and downloading a file 1000 times.So here a peer basically runs every time to register a file and download the file from another peer. The total time taken by this operation was 54 seconds.

When 2 Peers Used concurrently

So here a peer basically runs every time to register a file and download the file from another peer.The total time taken by this operation was 89 seconds

When 3 Peers Used concurrently

Here peers basically runs every time to register a file and download the file all 3 run concurrently from another peer.The total time taken by this operation was 130 seconds.