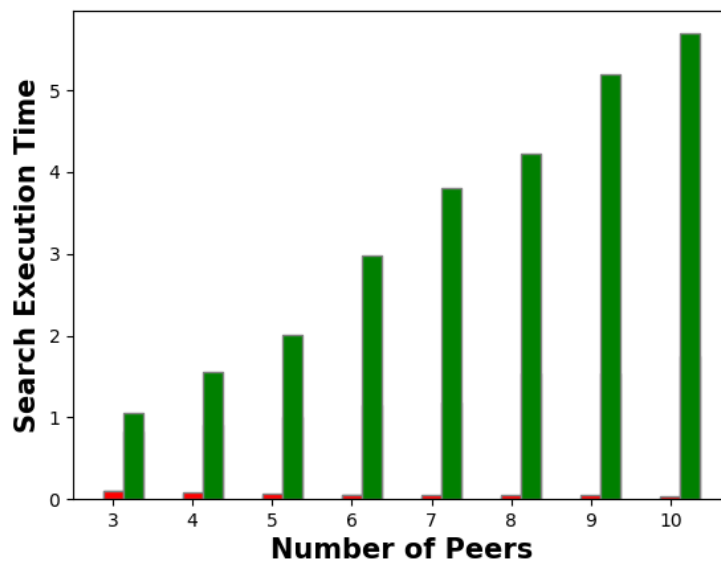
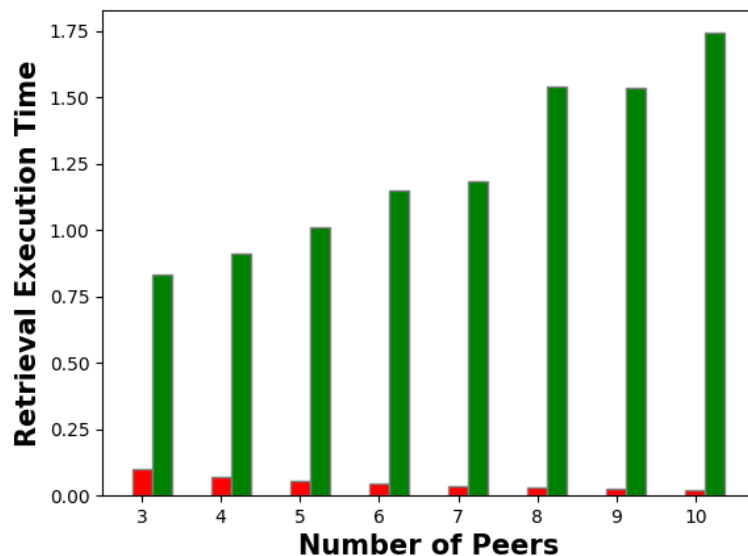


## Average Retrieval and Search Time for Sequential and Parallel Requests



The above plot represents average time to complete all (500) the parallel search requests (shown in green) and sequential search requests (shown in red) of clients by the central indexing server as seen by the clients as we increase the number of peers in at our server



The above plot represents average time to complete all (500) the parallel retrieve requests (shown in green) and sequential retrieve requests (shown in red) of clients by the central indexing server as seen by the clients as we increase the number of peers in at our server

## Performance of indexing server with 3 peers for sequential search and retrieve requests

```
Exiting Peer 7656
***** Starting to Get Results *****
Peer 0: retrieval start = 1645411681883, retrieval end = 1645411685154
Peer 1: retrieval start = 1645411686281, retrieval end = 1645411688108
Peer 2: retrieval start = 1645411689546, retrieval end = 1645411691155
Total retrieval time for all peers = 6707.0 Number of request made: 52500
Average retrieval time for one peer = 0.12775238095238095
***** Ending to Get Results *****
***** Starting to Get Results *****
Peer 0: searching start = 1645411685155, searching end = 1645411686265
Peer 1: searching start = 1645411688108, searching end = 1645411689542
Peer 2: searching start = 1645411691155, searching end = 1645411693161
Total search time for all peers = 4550.0 Number of request made: 52500
Average search time for one peer = 0.08666666666666667
***** Ending to Get Results *****
Test is ending
```

## Performance of indexing server with 3 peers for parallel search and retrieve requests

```
***** Starting to Get Results *****
Peer 0: retrieval start = 1645411770574, retrieval end = 1645411776356
Peer 1: retrieval start = 1645411770600, retrieval end = 1645411776413
Peer 2: retrieval start = 1645411770599, retrieval end = 1645411776468
Total retrieval time for all peers = 17464.0 Number of request made: 15000
Average retrieval time for one peer = 1.1642666666666666
***** Ending to Get Results *****
***** Starting to Get Results *****
Peer 0: searching start = 1645411776356, searching end = 1645411781527
Peer 1: searching start = 1645411776413, searching end = 1645411780964
Peer 2: searching start = 1645411776468, searching end = 1645411781871
Total search time for all peers = 15125.0 Number of request made: 15000
Average search time for one peer = 1.0083333333333333
***** Ending to Get Results *****
Test is ending
```