

Project 3 Read Me

Team Members:

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To run to project code:

1. cd into the directory where the file `project3.scala` is present.

2. Run the command:

```
project3.scala <numNodes> <numRequests>
```

What is working:

1. Successfully implemented the `join` functionality as per the paper

2. Each peer is represented as an akka actor

3. Each join updates the other nodes about it and updates the finger tables

4. Successfully implemented `key-search` in the network

5. Each node in the network searches for a key and this is repeated for `numRequests` number of random keys to obtain their average hops

For e.g.: if `numNodes = 100`; `numRequests = 8` then each node will search for a random key `k`. The next iteration will search for another random key. The program exits when `numRequests` is exhausted.

6. Before terminating the program outputs the average number of hops for each key (in `numRequests`)

Largest network managed:

Sr. No.	# of Nodes	# of Requests/Node	Best Average Hops	Worst Average Hops
1	100	8	2.46	4.34
2	500	8	5.696	10.378
3	800	8	5.77875	8.9625
4	1000	8	7.141	10.967