Project 3
Project Report – Chord Simulator
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Task:
To implement a simulation of the Chord Peer to Peer system and determine the convergence hops for message to traverse to destination.

What is Working?
Correct creation of chord with desired number of nodes and then calcualation of the average hops required for a given number of requests where each node maintains a finger table consisting of logN nodes.

Steps for exection are given below:

- Run the project by using commands in terminal:
-> c(project3).
-> project3:runApp(NumNodes, NumRequests).

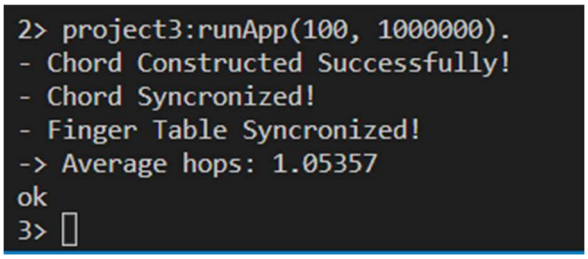
where NumNodes = number of nodes, NumRequests = number of requests to be sent.

What is the largest network you managed to deal with for Chord algorithm?

For Request count = 1000 , The largest chord with nodes = 1000, took hops = 13

```
3> project3:runApp(1000, 1000).
- Chord Constructed Successfully!
- Chord Syncronized!
- Finger Table Syncronized!
-> Average hops: 13.06
ok
4> project3:runApp(1000, 1000).
- Chord Constructed Successfully!
- Chord Syncronized!
- Finger Table Syncronized!
-> Average hops: 13.096
ok
5> project3:runApp(1000, 1000).
- Chord Constructed Successfully!
- Chord Syncronized!
- Finger Table Syncronized!
-> Average hops: 12.765
ok
6>
```

Largest number of Requests:
For Request count = 1000000 , and with nodes = 10, hops taken = 1



Largest Number of Nodes:
For Request count = 10 , and with nodes = 1000000, hops taken = 1