CSCI-665 Foundations of Algorithms
Longest Sequence Algorithms

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1. Section 01

A...

The...

2. Section 02

The formula for query time takes the form

$$Q = 7.25 + 52.78 \log_{10} N \tag{1}$$

where Q is...

3. Section 03

The `ChordQueryTime` class is...

Usage statement:

```
$ java ChordQueryTime <log N_L> <log N_U> <log N_D> \
                      <max_routers> <max_query_length> <T> <seed>
```

4. Section 04

See **Appendix A** for complete source code.

5. Section 05

```
$ java ChordQueryTime 2 4 0.1 0 0 1000 1234
      Query time, Q
N     Mean Stddev
100   3.34 2.51
126   3.99 3.01
```
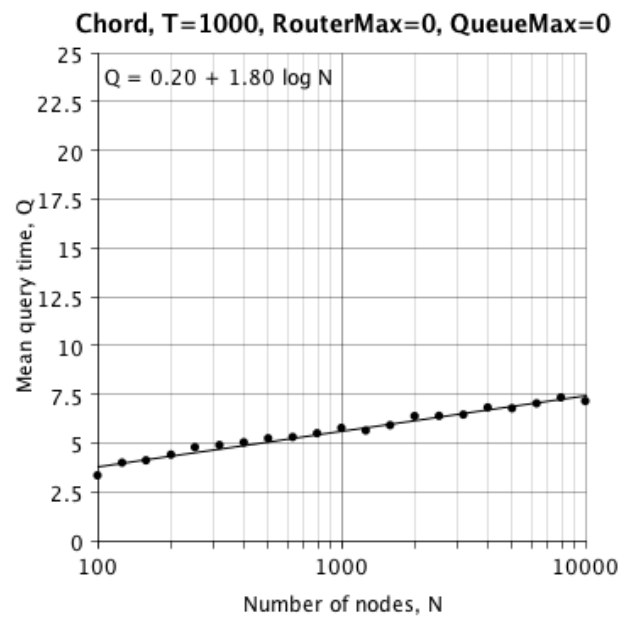
Figure 1

6. Section 06

Figure 2

7. References

[1] I. Stoica, R. Morris, D. Liben-Nowell, D. R. Karger, F. Kaashoek, F. Dabek, and H. Balakrishnan. Chord: a scalable peer-to-peer lookup protocol for internet applications. IEEE/ACM Transactions on Networking, 11(1):17-32, February 2003.

[2] Computer Science Course Library, Prof. Alan Kaminsky, Rochester Institute of Technology – Department of Computer Science; http://www.cs.rit.edu/~ark/cscl.shtml

Appendix A