

Algorithms in Comparative Genomics, Winter 2018/19

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Exercises

Exercise 09, 10.01.2019

Read the following paper and prepare yourself for a discussion of the therein presented data structures in next week's tutorial:

Bender, M. A., & Farach-Colton, M. (2000). *The LCA problem revisited*. Proceedings of CPM, 1776(Chapter 9), 88–94.

You should be able to answer questions similar to the following:

1. What is the ± 1 -RMQ problem?
2. Describe the key idea of the *Sparse Table* algorithm that requires $O(n \log n)$ preprocessing time and space.
3. What is the *Cartesian Tree* of an array?

Discussion of solutions in tutorial on 17.01.2019