

Advanced Algorithms in Bioinformatics (P4)

Sequence and Structure Analysis

Freie Universität Berlin, Institut für Informatik

David Weese, Sandro Andreotti

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5. Exercise sheet, 18. May 2011

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Exercise 1.

Given the text `catccabcb$` construct the suffix array using the Manber Myers algorithm.

Exercise 2.

Given the text `halloballo$` construct the suffix array using the Skew algorithm.

Exercise 3.

Show that the worst case runtime of the skew algorithm for a text of length n is $O(n)$.

Exercise 3.

Given a text T of length n , let $suftab'$ be the suffix array of T where suffixes are lexicographically ordered according to the first m letters for some $m < n$. Will the Kasai algorithm still compute the correct lcp values of adjacent suffixes in $suftab'$? Justify your answer!