Exercises

Algorithm theory

Winter term 2008/09

Exercise sheet 12

TASK 1 (1 point)**:**

Given the word $T = $ PANAMACANAL.

1. Use the word T and create an implicit suffix tree using Ukkonen's algorithm. Which rules are applied in each phase and each extension?

2. How can you get a suffix tree from your result? Construct the suffix tree for T.

TASK 2 (1 point)**:**

Given the pattern $P = $ BARBARASRABARBAR and
the text $T = $ BARBARBARBARBARASRABARBARASRABARBARBAR

1. Compute the next-array for the pattern P.

2. Perform the KMP-Algorithm to search the pattern in the text. Present each shift of the pattern during the search for all occurrences.