Exercises

Algorithm theory
Winter term 2008/09
Exercise sheet 12

TASK 1 (1 point):
Given the word $T = \text{PANAMACANAL}$.

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 $P = \text{BARBARASRABARBAR}$ and the text $T = \text{BARBARBARBARBARASRABARBARASRABARBARBAR}$

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.