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Advanced Algorithms

WS 2017/18

Homework 5

13.11.2017

Exercise 1:

Give a formal proof for the correctness of the solution of the string matching problem which uses a suffix tree for the considered text string.

Exercise 2:

Construct an example where the node $s(v)$ has an outgoing edge with the first symbol of its marking is $g \in \Sigma$ but the node v has not such an edge.

Exercise 3:

Prove Lemma 2.2 of the lecture.

Exercise 4:

Develop an linear time algorithm which, given a suffix tree for the string $x\#$, constructs a suffix tree for x .