

University of Waterloo
CS240R Fall 2017
Tutorial 8

Monday, November 13

Pattern Matching

1. Let $P = \text{abacabaca}$ and $T = \text{abacabacdabaca}$. Search for P in T using the KMP algorithm.
2. Build the suffix-skip array for the following strings: `cbadabacaba`, `ingstating`, and `aabaa`.
3. Let $P = \text{ababbcbabcbab}$. Construct the last-occurrence function over the alphabet $\{a, b, c, d\}$ and the suffix-skip array. Then search for the pattern in the following text, using the Boyer-Moore algorithm:

`ababababbcbabababbabbcbabcbadababbcbbbacbababbcbabcbab`