CS 240: Data Structures and Data Management

Spring 2022

Tutorial 10: July 18

- 1. Let P = abacabaca and let T = abacabacdabaca.
- a) Compute the failure array
- b) Search for P in T using the KMP algorithm.
- 2. Let s be a string of length n and let \mathcal{T}_s denote the corresponding suffix tree. For an integer parameter $1 \leq \ell \leq n$, give an O(n) time algorithm that finds the most commonly occurring substring of length ℓ in s.
- 3. Let P = MOM and let T = ALOMOMOLA. Search for P in T using Suffix Arrays.