

Suffix Array, Burrows-Wheeler Exercise

CMSC423 Fall 2014

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Name(s):

UID(s):

Question 1. Construct the **suffix array** for string **abbaaba\$**. Use 0-based indexing.

Question 2. (k -mer counting) Design an algorithm using a suffix array to output, for a given string S and integer k , **all** pairs (b, i) where b is k -mer occurring in S exactly i times.

Question 3. Compute the Burrows-Wheeler transform of string **abbaaba\$**.

Question 4. Write down the occurrence count matrix (LF mapping matrix) for the BWT you computed in Question 3.