Top-20 Training Program
(SuffixArray & SuffixTree Problems)

Apply the solution building strategies discussed in class to solve following problems.

Group1: Suffix Array & Suffix Tree Construction

Suffix Array Construction: In class, we have discussed how to construct suffix array in O(n^2 log n). In this problem try to build suffix array in most efficient time. http://www.spoj.com/problems/SARRAY/

SuffixTree Construction: In class, we have discussed how to construct suffix Trie. In this problem, try to build suffix tree (which is compressed suffix trie) discussed at this link,https://www.hackerearth.com/practice/data-structures/advanced-data-structures/suffix-trees/tutorial/

Group2: Substring problems-I

Longest Repeated Substring-I: Given a string, find the longest repeated substring. Assume that overlapping is permitted while substring gets repeated.

Longest Repeated Substring-II: Given a string s, find the longest substring that occurs at least K times.

Average LCP: http://acm.timus.ru/problem.aspx?space=1&num=1393

Pattern Match: Given a string s and patterns p1,p2,p3,..pk, find an efficient algorithm that finds patterns in a string s.

Group3: Substring problems-II

Longest Palindromic Substring: https://leetcode.com/problems/longest-palindromic-substring/description/

Number of Palindromic Substrings:
https://leetcode.com/problems/palindromic-substrings/description/

Distinct Substrings: http://www.spoj.com/problems/DISUBSTR/

String Cleaning: http://www.spoj.com/problems/ADACLEAN/

Ada and Substring: http://www.spoj.com/problems/ADASTRNG/

Longest Common Substring: http://www.spoj.com/problems/LCS/

Longest Common Subarray: https://leetcode.com/problems/maximum-length-of-repeated-subarray/description/

Number of Substrings: http://www.spoj.com/problems/NSUBSTR/