**Tutorial 9. Student Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student id:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Question 1:** Let X=aabbacab and Y=baabcbb. Find the shortest common super-sequence for X and Y. (Backtracking process is required.)

Answer (Basic part, 0.5 point for this exercise.)

**Question 2:** You are trying to decide where to place billboards on a highway that goes East-West for M miles. The possible sites for billboards are given by numbers x1, …, xn, each in the interval [0, M]. If you place a billboard at location xi, you get a revenue ri. You have to follow a regulation: no two of the billboards can be within less than or equal to 5 miles of each other.

Design an algorithm to place billboards at a subset of the sites so that you maximize your revenue subject to this constraint.

**Answer:**