LAB Assignment 6
CS205

Date: 08/10/2020 **Deadline: 10/10/2020 (7pm)**

a. Let us say we have N jobs and for each job there is an associated duration and loss. For job i, duration d_i indicates total hours required to finish the job while l_i indicates the loss per hour due to delay in start. All the jobs are available at the beginning. We can schedule at most one job at a time. Please find out a schedule for set of given jobs so that loss is minimized. If there is more than one possible solution, then give priority to lower number job. [8]
Examples:

Input :
l = {3, 1, 2, 4} and
d = {4, 1000, 2, 5}
Output : 3, 4, 1, 2
We should first complete job 3, then jobs 4, 1, 2 respectively.
Input :
l = {1, 2, 3, 5, 6}
d = {2, 4, 1, 3, 2}
Output : 3, 5, 4, 1, 2
Explanation: We should complete jobs 3, 5, 4, 1 and then 2 in this order.

Submit 6a.c

b. Two nodes are connected if there is a common substring of size 2 or more. Like “Ajay” and “Vijay” will be connected as “jay” a common sub-string of length 3 present in both the names/node. So from a given set of names, you are supposed to create a network at first. Now influence of a node in the network can be determined by following formulae m^2+n where m is the number of first hop neighbors and n is the number of second hop neighbors. Intimacy of two friends is number of unique common friends within 2 hops. Person 2 will be in the society of person 1 if
   1. At least in one shortest path from person 1 to person2 where each edge in path maintain a minimum intimacy threshold
   2. Also each node (including person 2) in the path maintains an influence level which does not differ by |t| from person 1.

   For any given name you have to find his/her society. [12]

Submit 6b.c