LAB-8

Question 1:-

Consider the following 8 activities with their starting and finishing time.

Activity	A1	A2	A3	A4	A5	A6	A7	A8
Start	1	0	1	4	2	5	3	4
Finish	3	4	2	6	9	8	5	5

Write a program to find maximum non conflicting activities (consider n activities).

Question 2:-

i. Given weights and values of n items, put these items in a knapsack of capacity W to get the maximum total value in the knapsack. In other words, given two integer arrays Val [0...n-1] and wt [0...n-1] which represent values and weights associated with n items respectively. Also given an integer W which represents knapsack capacity, find out the maximum value subset of val[] such that sum of the weights of this subset is smaller than or equal to W. You cannot break an item, either pick the complete item, or don't pick it (0-1 property).

ii. Perform the same operation using fractional knapsack

Question 3:-

Given arrival and departure times of trains in a railway station. Find the minimum number of platforms required so that no train waits while arriving. Consider the case of n Trains.