Heavens light is Our Guide
Department of Computer Science & Engineering, RUET
Subject code: CSE-2202, Title: Computer Algorithms, Lab manual: 4
Last Time of Submission: Before Next lab

Title: Find out the optimal solution using Fractional Greedy approach for the following tasks.

1. Solve the following problems using greedy approach?

Item #	Weight W_i	Benefit b_i
1	2	3
2	4	5
3	5	8
4	3	4
5	9	10

Where knapsack capacity is: m=20.

Sample Input
5
2 4 5 3 9
3 5 8 4 10

In the input file **knapsack.txt** file, first line contain no of jobs, 2nd line contain weights and 3rd line profit.

Sample Output
Optimal solution: ?

2. Consider the following problem and solve it using job sequence problem to obtain optimal benefits.

Let $n = 4$ jobs with profit (pl, P2, P3, P4) = (100, 10, 15, 27) and deadlines (d1, d2, d3, *d4)* = (2, 1, 2, 1).

In the input file **jobsequence.txt** file, first line contain no of jobs, 2nd line contain profit and 3rd line deadline.

Sample Input
4
100 10 15 27
2 1 2 1

Sample Output
Optimal solution: ?