Online Assignment

Roll:
Name:

Filename: your-roll-AS2-P1.pdf
Time: 45 minutes
(Submission in **minimum time** with the correct answer will get **maximum marks**)

1. Write a program for the **fractional knapsack problem** in C/C++. Run your program for the following sets of data.

1) **Capacity** = 165

   Weights = {29, 44, 23, 53, 38, 63, 31, 85, 89, 82}

   Profits = {49, 68, 92, 60, 43, 67, 57, 84, 87, 72}

2) **Capacity** = 750

   Weights = {77, 80, 82, 87, 90, 94,

                   98, 106, 70, 110, 113, 115, 118, 120, 73}

   Profits = {149, 150, 156, 163, 173, 184, 192,

                   135, 201, 210, 214, 221, 229, 240, 139}

a) Show your output of the program.

a-1) Output for the first data set:

a-2) Output for the second data set:

b) Describe the design method of your program.

c) Give the code of your program.