CS3310 Project #2 (120 Points)
Spring-2020
Instructor: Tannaz Rezaei
Due Date: Firday - 04/24/2020 - Midnight

Task #1 – Fractional Knapsack

Use greedy approach to implement **fractional knapsack** problem.

a. Ask user for knapsack capacity.
b. Ask user for *n* objects weights and profits or read an input.txt that contains *n* objects weights and profits.
c. List objects that maximize the profit and show the maximum profit as output considering knapsack capacity**.** **(60 Pts)**

Task #2- 0/1 Knapsack

Use Dynamic programming approach to implement **0/1 knapsack** problem.

a. Ask user for knapsack capacity.
b. Ask user for *n* objects weights and profits or read an input.txt that contains *n* objects weights and profits.
c. List objects that maximize the profit and show the maximum profit as output considering knapsack capacity. **(60 Pts)**

What to Submit?

1. Java or Python source codes for each task (**Please comment your code sufficiently**)
2. If your code reads from an input.txt file, include the text file
3. Readme.txt (Please describe how to run your code)
4- Executable file.
5. Please zip all documents as yourname_project2.zip and submit it on blackboard.

Discussion among students is encouraged, but I expect each student to hand in original work.