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CPSC 5115 – Project 6

**Problem:**

Write a Java program that implements greedy discrete and continuous algorithms for the knapsack problem. You have to implement both - the greedy discrete knapsack problem and the greedy continuous knapsack problem. Develop a Java class greedyKnapsack with the following methods:

* constructor: inputs the knapsack capacity, number of items, double values for the item values, double values for the item weights
* knapsackOrder(): orders the items, item values, and weights in descending order of the value/weight ratios
* printKnapsack(): prints out in a tabular format (see p. 454) the items, values, weights, value/weight, and take weight values
* greedyKnapsackD(): implements the discrete greedy knapsack algorithm
* greedyKnapsackC(): implements the continuous greedy knapsack algorithm
* main() method: test the functionality of the greedyKnapsack class; creates an instance of greedy discrete the knapsack problem, solves the problem and prints out the solution; repeat these steps with an instance of the greedy continuous knapsack problem

**Solution:**

A screenshot of the programs output can be seen on the following page.

