KnapsackProblem

- + bruteForce(int[], int[], int, int, List<Item>, Knapsack): Knapsack
- + dynamicProgramming(int, int, int[], int[], List<Item>): Knapsack
- + save(String, Knapsack)

0..*

Knapsack

- maxWeight: int
- totalValue: int
- + setMaxWeight(int)
- + addToItems(Item)
- + removeFromItems(Item)
- + getMaxWeight(): int
- + getTotalValue(): int
- + getItems(): List<Item>
- + setKTableIn(KTable)
- + getKTableIn(): KTable

Item

- name: String
- value: int
- weight: int
- + getName(): String
- + getValue(): int
- + getWeight(): int
- + getKnapsacks(): List<Knapsack>
- + addToKnapsacks(Knapsack)

0..*

0..1

KTable

- matrix: Knapsack[][]
- + add(int, int, Knapsack)
- + getTotalValue(int, int): int
- + getKnapsack(int, int): Knapsack
- + addToListOfKnapsacks(Knapsack)
- + getKnapsacksAssociatedWith(): List<Knapsack>

0..*