Fall 2018 CSE221 Section 3 Quiz-4 Set A

Total Marks: 10 + 10 = 20

1. Survival game! You are out for an adventure with your backpack which can carry about 7kgs of goods. You want to fill 4 kgs with food and drink. You have $15 to buy food and drink. Use an appropriate algorithm to buy your food so that you can survive the maximum amount of days.

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| --- | --- | --- | --- | --- | --- |
| Items | Package 1 | Package 2 | Package 3 | Package 4 | Package 5 |
| Price ($) | 7 | 5 | 5 | 4 | 8 |
| Weight (grams) | 200 | 150 | 100 | 350 | 300 |
| Days lasting | 3 | 2 | 3 | 4 | 3 |

1. Using the data from question 1, solve it using fractional knapsack and compare your answer.