

Assignment 1

Andrea Domiter

July 2018

1 Part 4: Questions

1. What is a greedy algorithm? A greedy algorithm is an algorithm that always takes the best immediate or locally-optimal solution. In other words, it makes the best choice at that moment.
2. How else could you solve the above problem? Another way to solve Part 2-Change is to divide the problem into smaller parts. Thus, the sum of each small problem will then be the solution to the whole problem.
3. What other problems are greedy algorithms successfully used for? Greedy algorithms can be used to compress data (Huffman encoding), find the shortest path through a graph (Dijkstra's Algorithm), or finding a minimum spanning tree (Prim's Minimum Spanning Tree (MST)).

2 References

<https://www.hackerearth.com/practice/algorithms/greedy/basics-of-greedy-algorithms/tutorial/>
<https://www.geeksforgeeks.org/top-20-greedy-algorithms-interview-questions/>