

Design and Analysis of Algorithms

5.2 Greedy Algorithms

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5.2.2

Suppose we find a minimum spanning tree T in a graph.

Suppose we then add 1 to the weight of every edge in the graph.

Is T still a minimum spanning tree? Why or why not?

Yes T is still a minimum spanning tree because adding 1 to the weight will not

1. create cycles
2. change the ordering of the edge weights

5.2.4

Assign the following strings:

- A: 0
- B: 00
- C: 01
- D: 1

Then $AABDC = 0000101$

What is the problem with this?

The problem is that C could be mistaken for AD, or B could be AA, or BC could be AAAD etc.