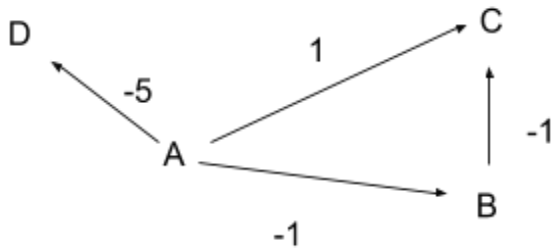
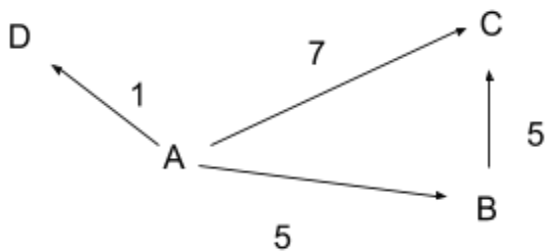


Proof by Contradiction.

Consider the following graph:



When adjusted it becomes:



Before, the lowest cost path from A to C was (A,B,C) but after the transformation it became (A,C)

This is an example when the method fails to conserve the lowest cost path.