Homework 5

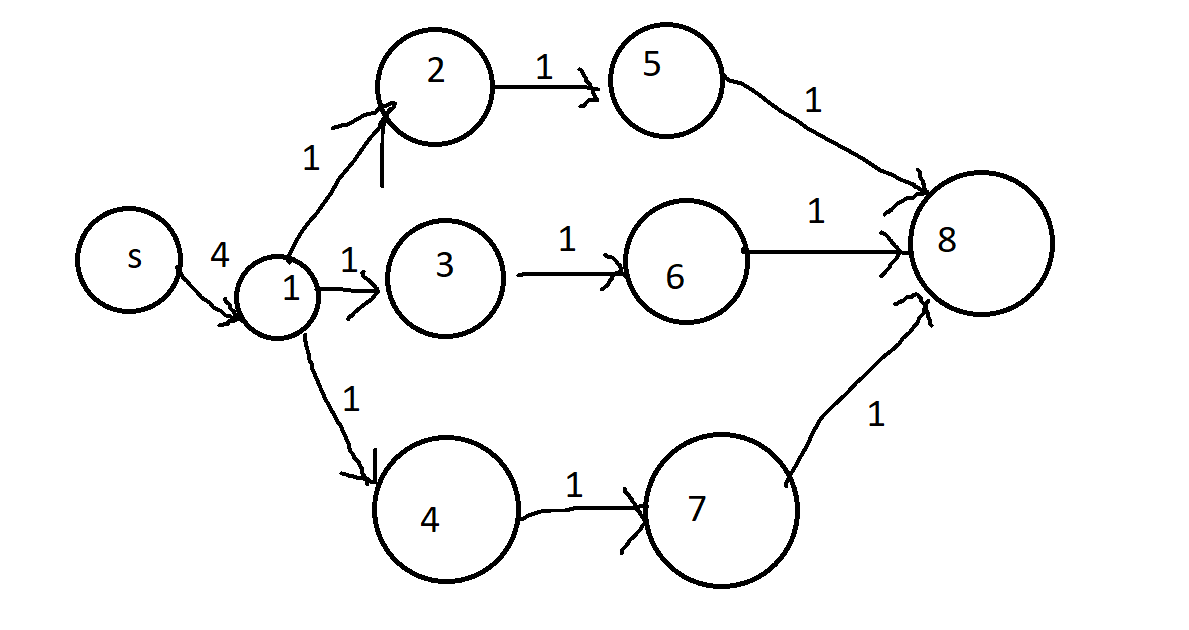
# Problem

*It is possible that, after the technological innovation, is no longer the minimum cut.*

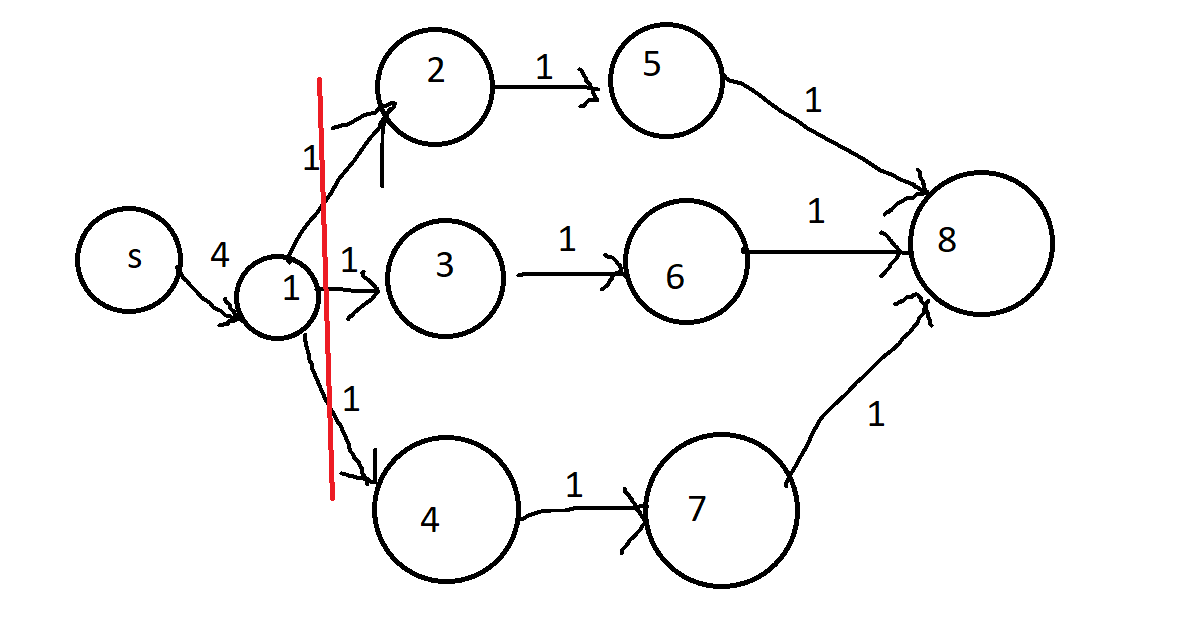
Reference: <https://stackoverflow.com/questions/40277603/is-minimum-cut-same-for-the-graph-after-increasing-edge-capacity-by-1-for-all-ed#:~:text=Since%20c%20is%20a%20constant,N(c%2B1)%20>.

Consider the counter example below.

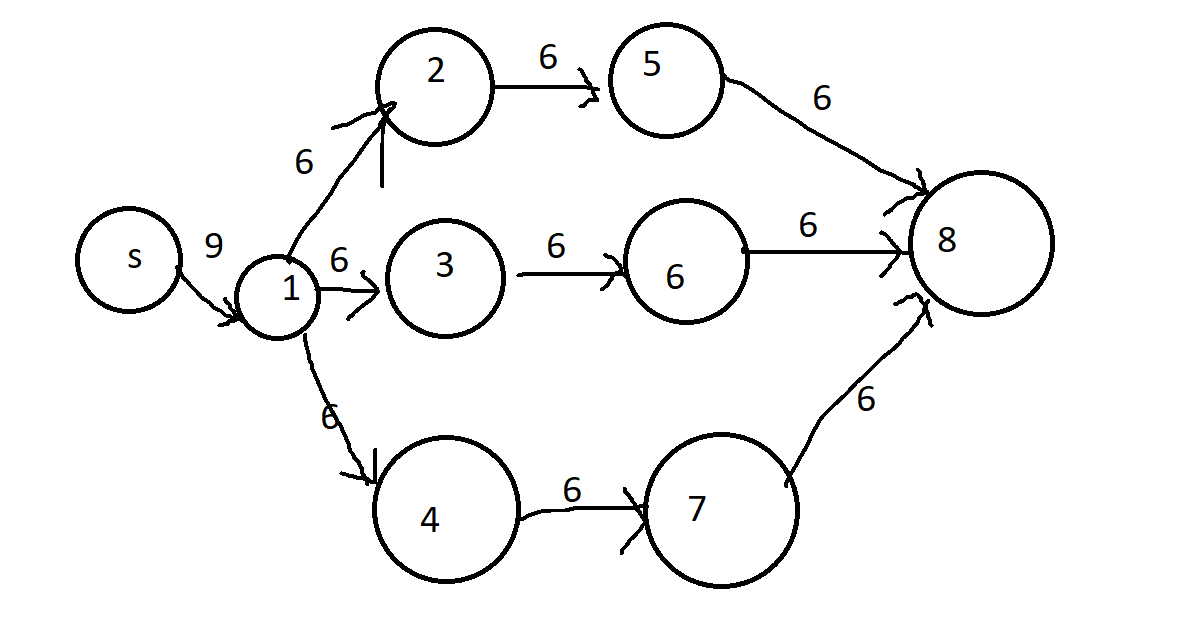
Before the technological innovation, we have the following network. The edge labels are capacities.



The minimum cut is shown below where and



Now, consider the technologies innovation, where capacities are increased by 5, which yields the following network.



We can easily see that the new minimum cut has changed with and .

