# In the LP formulation of our example of the minimum-cost flow problem:

Suppose that

m = the number of constraints (not including nonnegativity constraints)

n = the number of decision variables

What are m and n?

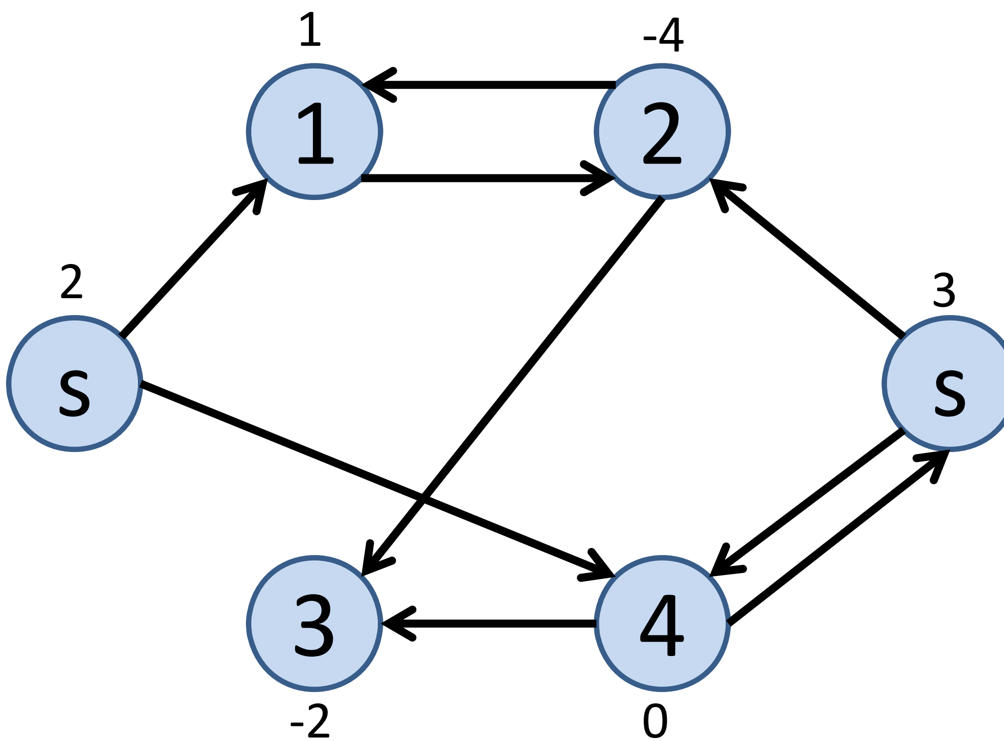
a) m = 6, n = 9

b) m = 9, n = 6

c) m = 9, n = 15

d) m = 15, n = 9

e) m = 15, n = 6



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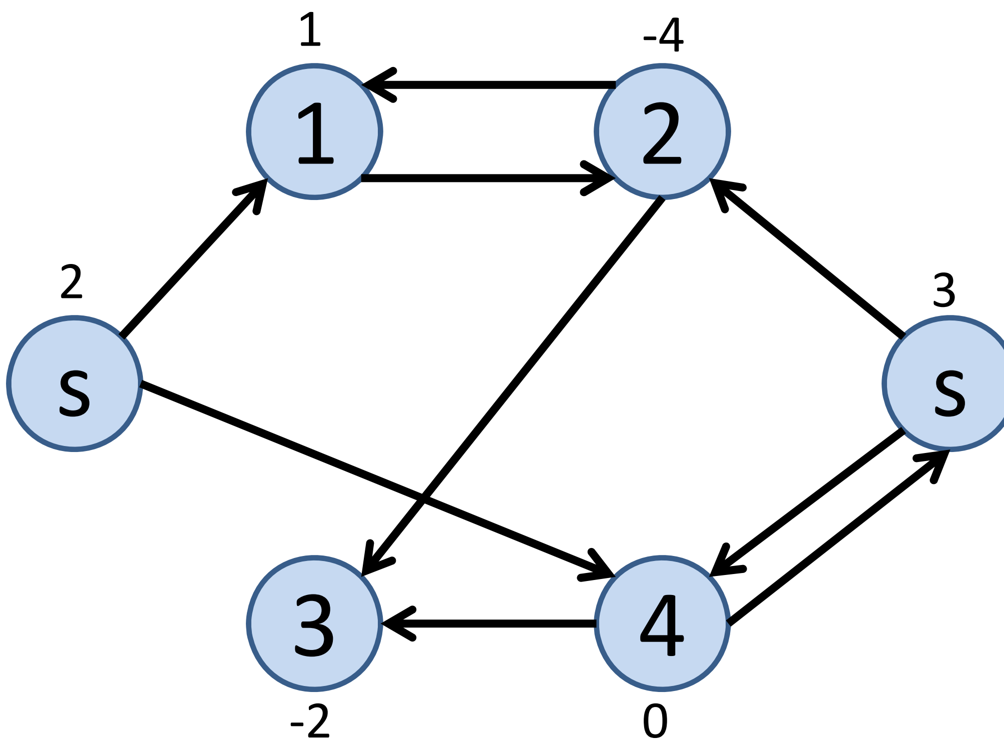
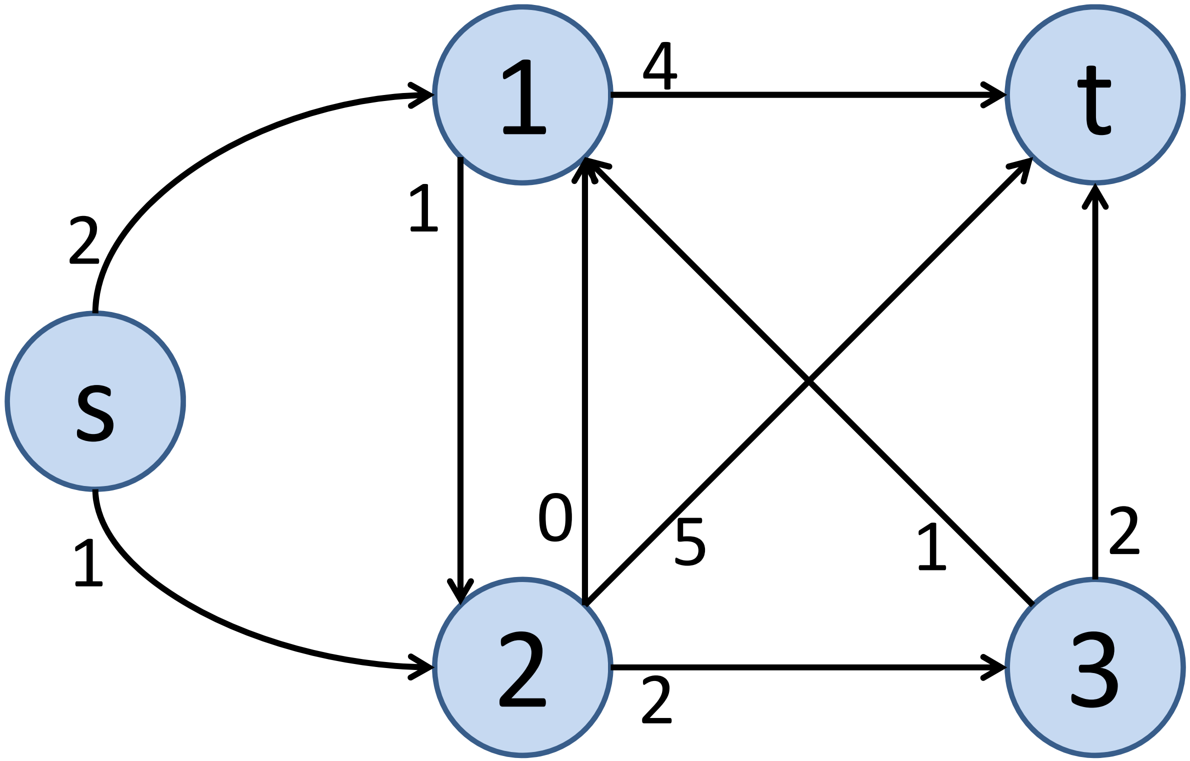
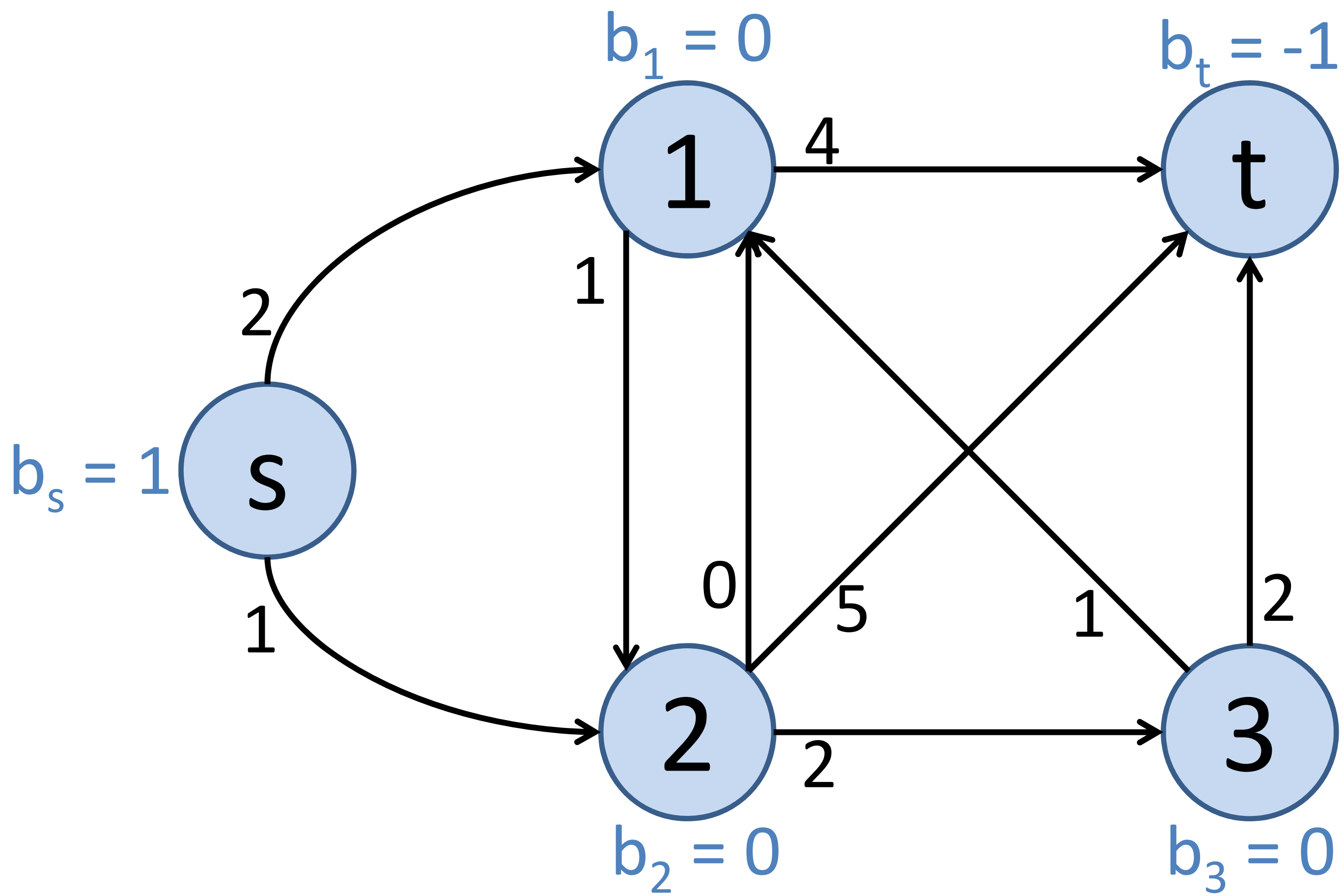


# A Shortest-path problem

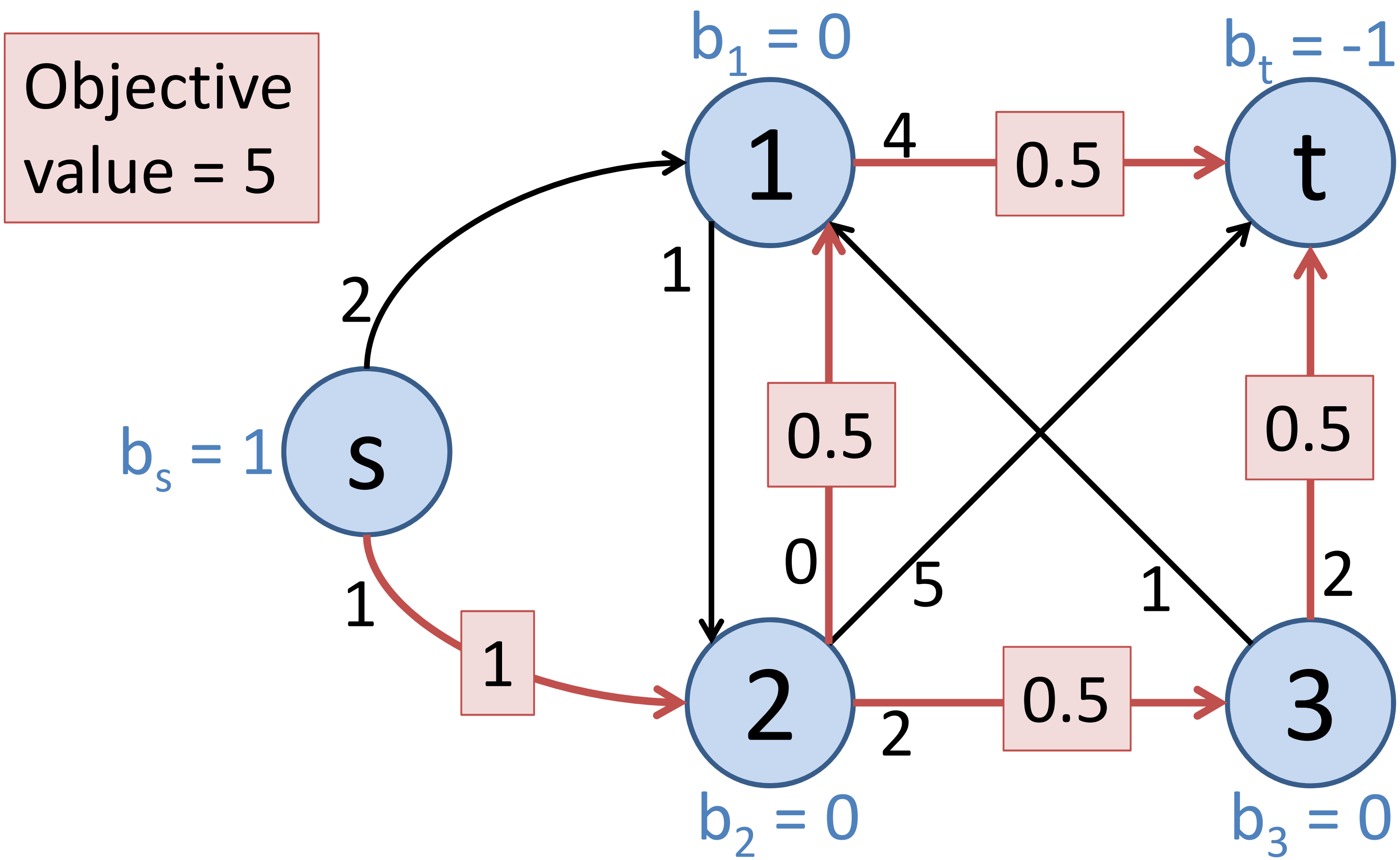


# The minimum-cost flow formulation




$U_{ij}$ = 1 for each edge *(i, j) in the graph*

# A noninteger-valued solution

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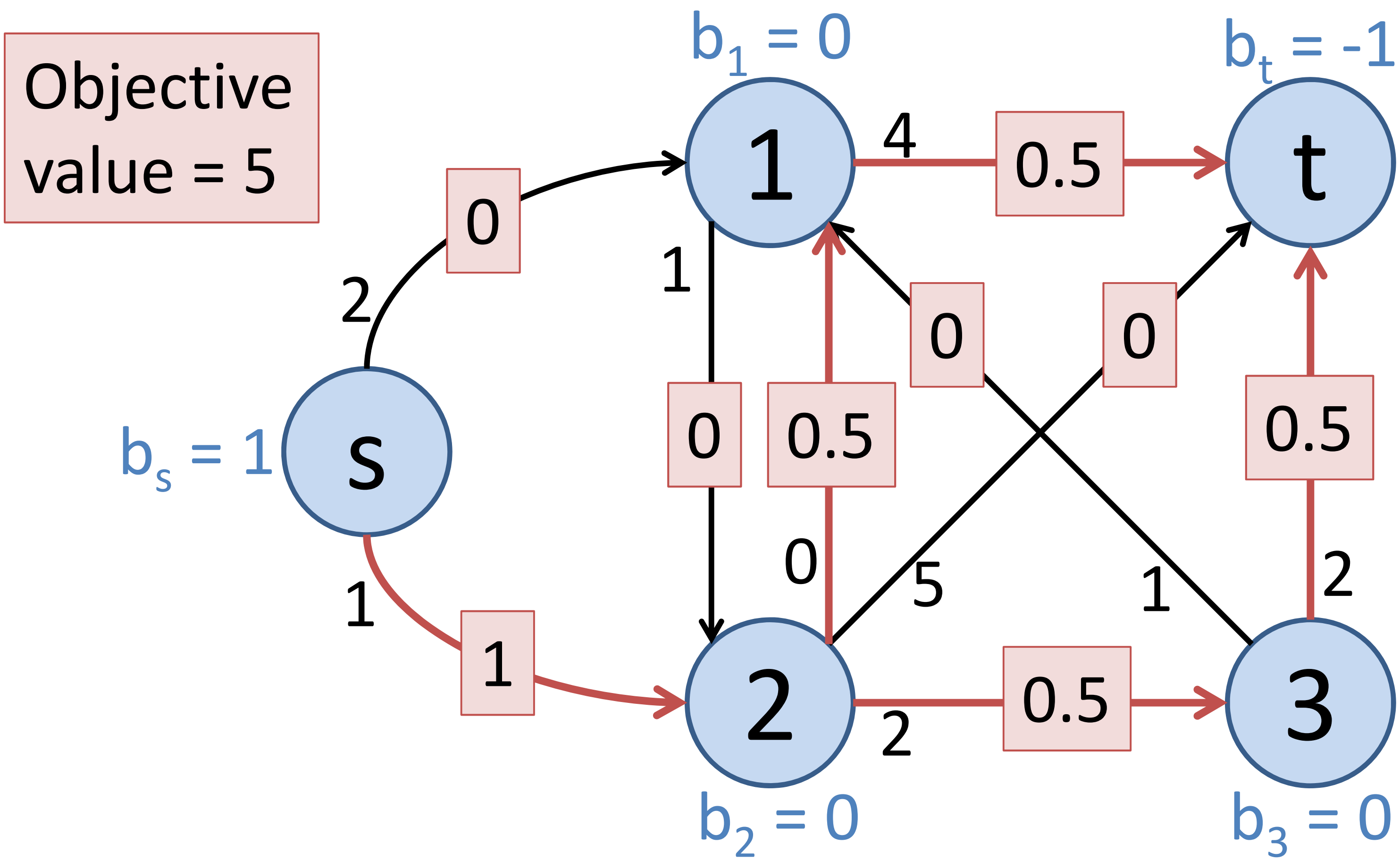


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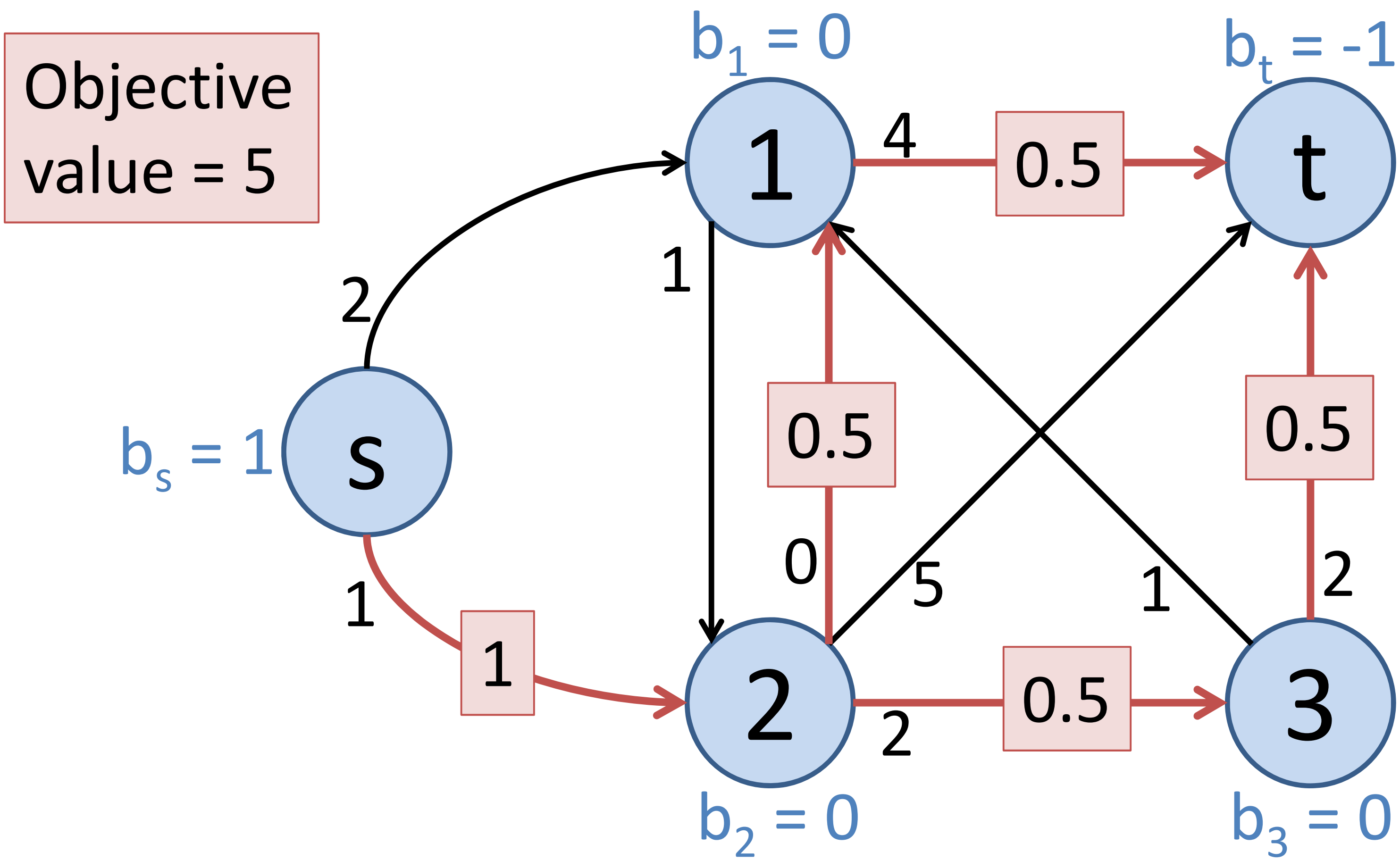
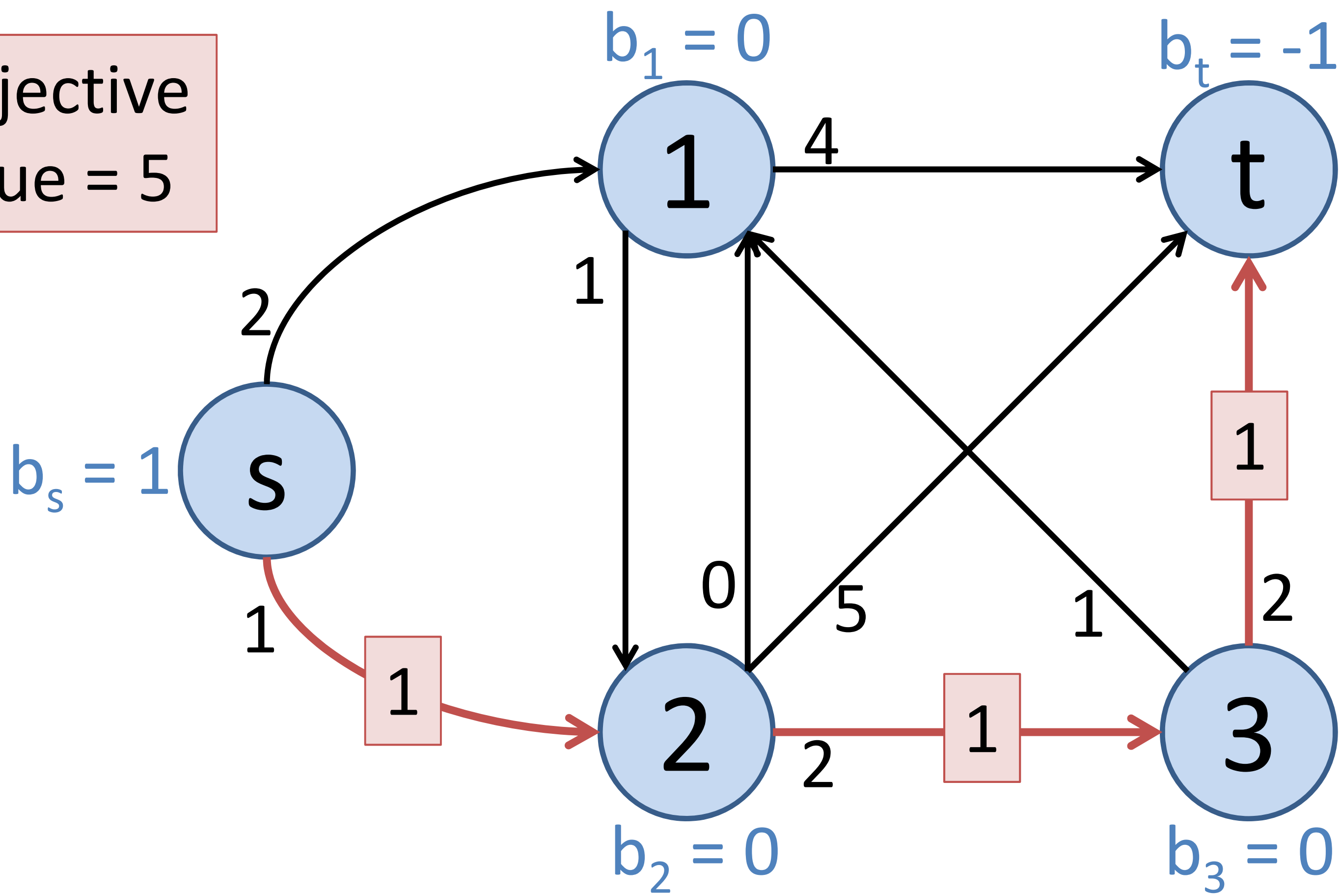



$U_{ij} = 1$ for each edge *(i, j) in the graph*

# An integer-valued solution

Objective value = 5

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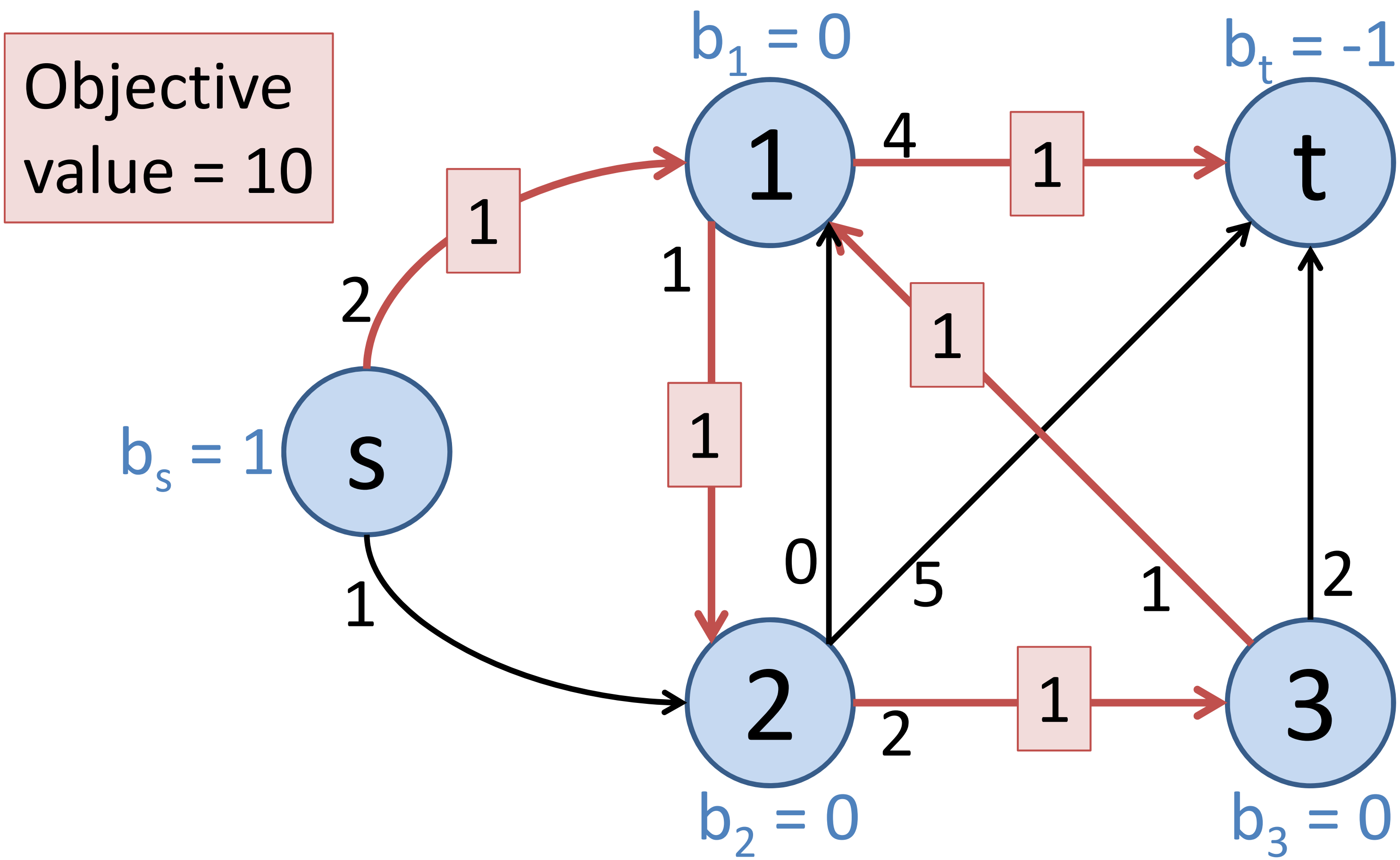


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