Network Design [Network Flows]
May, 27th 2019
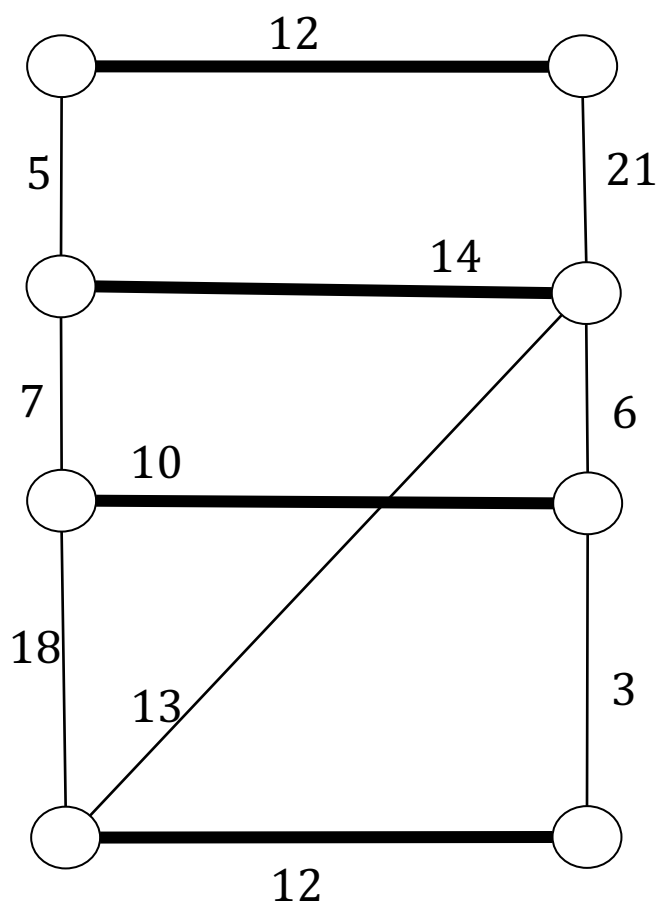
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Exercise 1
Find the minimum weight perfect matching on the following graph starting from the perfect matching represented by thick arcs.
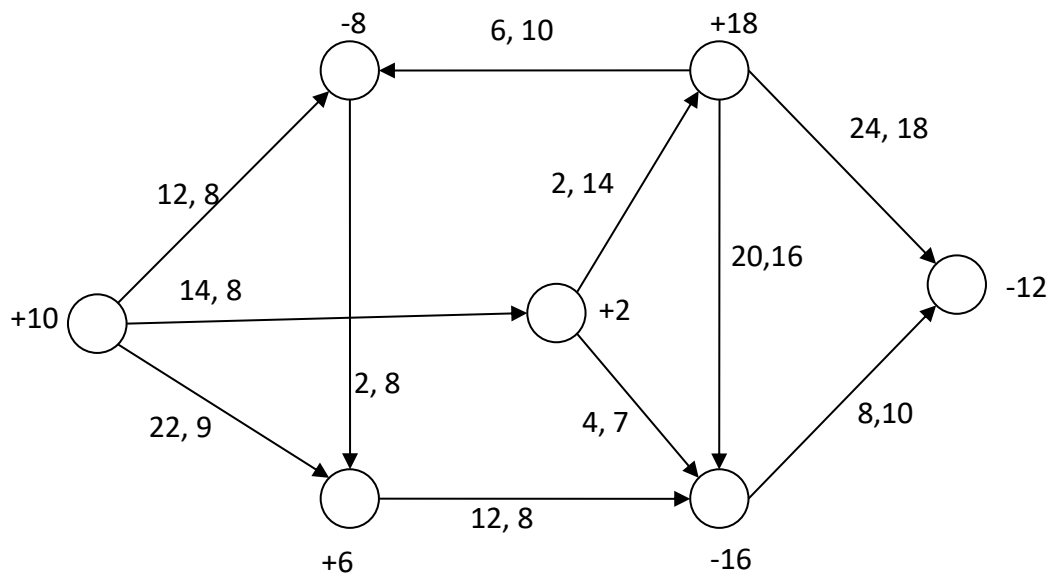
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Exercise 2
Evaluate the min cost flow on the following graph.
[$(c_{ij}.u_{ij})$ are the figures represented on the arcs]

Exercise 3
The following graph represents a distribution network in which black nodes are warehouses and white nodes customers. Each customer requires one unit of a good that can be supplied from any warehouse. Figures on the arcs represent the cost of shipping the good on that arc (arcs are uncapacitated), while numbers in the box represent the availability of the good in each warehouse.

    1. Find the minimum cost shipping solution.

    [Bonus] 2. Suppose to have the possibility of moving all goods from the central warehouse to the warehouse on the top right corner. How much would you be willing to pay for this?

Surname   _____

Name   _____

Matricola ID   _____