

Concepts and Algorithms of Optimization – Series 5

www.math.uni-magdeburg.de/institute/imo/teaching/wise17/cao/

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Exercise 1

Give IP formulations for the problems of

- finding a perfect matching M in a graph $G = (V, E)$ with maximal weight $w(M)$ and
- finding a (general) matching M in a graph $G = (V, E)$ with maximal weight $w(M)$.

Name and give arguments for the similarities and the differences of the models.

Exercise 2

Solve the matching problems given in Series 4 Exercise 1 (a) and Exercise 2 by applying AMPL. Use one general formulation of the model and two corresponding data files to solve both problems.