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Approximation Algorithms

Homework sheet 5 (Deadline 11.06.19 12:00 – before the lecture starts.)

All exercises must be done individually. Feel free (and encouraged) to discuss among each other but each solution must be written independently. Two or more submissions found with exactly the same solution on any of the exercises will be awarded no points for the entire exercise sheet. The same holds in case of directly copying from any other source.

Exercise 1 (4 points) Exercise 4.1 from [WS].

Exercise 2 (4 points) Exercise 4.3 from [WS].

Exercise 3 (4 points) Exercise 5.1 from [WS].

Note: $\max_{(i,j) \in E: i \in V_a, j \in V_b, a \neq b} w_{ij}$ should be: $\max \sum_{(i,j) \in E: i \in V_a, j \in V_b, a \neq b} w_{ij}$.

Exercise 4 (8 points) Exercise 5.2 from [WS].