

Concepts and Algorithms of Optimization – Series 12

www.math.uni-magdeburg.de/institute/imo/teaching/wise19/cao/

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Exercise 1

Solve the following integer program using the branch and bound method. For the linear subproblems you can use and modify the template from the lecture website.

$$\begin{array}{ll} \max & 100x_1 + 150x_2 \\ \text{s. t.} & 8000x_1 + 4000x_2 \leq 40000 \\ & 15x_1 + 30x_2 \leq 200 \\ & x_1, x_2 \geq 0 \\ & x_1, x_2 \in \mathbb{Z} \end{array}$$