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### Exercises Branch and Bound

**Exercise 1.** Solve the following ILPP using Branch and Bound

(1)                      Problem N:                      
$$\begin{array}{ll} \min & x_1 - 2x_2 \\ \text{subject to} & -4x_1 + 6x_2 \leq 9 \\ & x_1 + x_2 \leq 4 \\ & x_1, x_2 \geq 0 \\ & x_1, x_2 \text{ integer.} \end{array}$$