

Spoken Tutorial, IIT Bombay

<https://spoken-tutorial.org>

Scilab - FOSSEE Optimisation Toolbox
Integer Linear Programming- Assignment

Solve the following integer linear programming problem

$$\min_x 5000x_1 + 5550x_2 + 1000x_3 + 1500x_4$$

subject to:

$$5x_1 + 7x_2 + 2x_3 \geq 9,$$

$$3x_1 + 2x_2 \geq 3,$$

$$425x_1 + 300x_2 + 50x_3 + 100x_4 \geq 500,$$

$$0 \leq x_j \leq 1, \quad j \in \{1, 4\},$$

$$x_j \in \mathbb{Z}, \quad j \in \{1, 4\}.$$