CS 451 - Activity 15

objective function:

$$\min z = 50x_1 + 20x_2 + 30x_3 + 80x_4$$

subject to:

$$400x_1 + 200x_2 + 150x_3 + 500x_4 \geq 500 \text{ (calories constraint)}$$

$$3x_1 + 2x_2 \geq 6 \text{ (chocolate constraint)}$$

$$2x_1 + 2x_2 + 4x_3 + 4x_4 \geq 10 \text{ (sugar constraint)}$$

$$2x_1 + 4x_2 + x_3 + 5x_4 \geq 8 \text{ (fat constraint)}$$

$$x_1, x_2, x_3, x_4 \geq 0.$$