OPERATIONS RESEARCH

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Homework

Exercise 1: Solve the following linear program using the simplex method

$$\text{Max } Z = 3X_1 + 4X_2$$
$$\text{St}$$
$$X_1 + X_2 \leq 450$$
$$2X_1 + X_2 \leq 600$$
$$X_1 \geq 0, X_2 \geq 0$$

Exercise 2: Solve the following linear program using the simplex method

$$\text{Min } Z = 3X_1 + 4X_2$$
$$\text{St}$$
$$6X_1 + 8X_2 \geq 100$$
$$7X_1 + 12X_2 \geq 120$$
$$X_1 \geq 0, X_2 \geq 0$$