

- Solve the LPP by Simplex method.

$$\begin{aligned} &\text{Maximize } Z = 4X_1 + 6X_2 \\ &\text{Subject to } \quad X_1 + 2X_2 \leq 8 \\ &\quad \quad \quad 6X_1 + 4X_2 \leq 24 \\ &\quad \quad \quad X_1, X_2 \geq 0, \end{aligned}$$

- Solve the LPP by Simplex method.

$$\begin{aligned} &\text{Maximize } Z = 2X_1 + 3X_2 \\ &\text{Subject to the constraints } \quad X_1 + 2X_2 \leq 6 \\ &\quad \quad \quad 2X_1 + X_2 \leq 9 \quad X_1, X_2 \geq 0 \end{aligned}$$

- Solve the LPP by simplex method

$$\begin{aligned} &\text{Maximize } Z = 8X_1 + 2X_2 \\ &\quad \quad \quad -4X_1 + 2X_2 \leq 1 \\ &\text{Subject to } \quad 5X_1 - 4X_2 \leq 3 \quad X_1, X_2 \geq 0 \end{aligned}$$