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$$\mathcal{B} = \{ \quad \}, \quad B = \begin{bmatrix} \quad \\ \quad \\ \quad \end{bmatrix}, \quad c_B = \begin{bmatrix} \quad \\ \quad \end{bmatrix}, \quad \underline{Bx_B = b} \implies x_B = \hat{b} = \begin{bmatrix} \quad \\ \quad \end{bmatrix}$$

$$\mathcal{N} = \{ \quad \}, \quad N = \begin{bmatrix} \quad \\ \quad \\ \quad \end{bmatrix}, \quad c_N = \begin{bmatrix} \quad \\ \quad \end{bmatrix}$$

$$\underline{B^\top y = c_B} \implies y = \begin{bmatrix} \quad \\ \quad \end{bmatrix} \implies \underline{\hat{c}_N = c_N - N^\top y} = \begin{bmatrix} \quad \\ \quad \end{bmatrix}$$

$$\boxed{\hat{c}_N \geq 0 \text{ ? : stop with optimum}} \quad \hat{c}_N \xrightarrow[\text{min}]{\text{index of}} t = \boxed{\quad} \rightarrow \underline{B\hat{A}_t = A_t} \implies \hat{A}_t = \begin{bmatrix} \hat{a}_{1,t} \\ \vdots \\ \hat{a}_{m,t} \end{bmatrix} = \begin{bmatrix} \quad \\ \quad \\ \quad \end{bmatrix}$$

$$\boxed{\hat{A}_t \leq 0 \text{ ? : stop, unbounded}} \quad \left\{ \frac{\hat{b}_i}{\hat{a}_{i,t}} \right\} = \left\{ \quad \right\} \quad \begin{matrix} \text{index of} \\ \rightarrow \\ \text{min over } \hat{a}_{i,t} > 0 \end{matrix} \quad s = \boxed{\quad}$$


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