

$$\bar{c}^T = c^T - c_B^T B^{-1} \cdot A$$

$n-m$ nonbasic
variables

$$\bar{c}_j = c_j - \underbrace{c_B^T \cdot B^{-1} \cdot A_j}_{p^T}$$

$O(m)$ steps

$\rightarrow O((n-m) \cdot m)$ steps