

Implement simplex algorithm with the following assumptions

1. Rank of matrix is equal to the number of columns

Input: 1. Matrix 'A' of m rows and n columns 2. Constraint vector 'b' of length m 3. cost vector 'c' of length n

Requirements: Find a vector 'x' of length n such that $Ax \leq b$ and $c \cdot x$ is maximized

Note: Initial feasible point is not given

Output: vector x and $c \cdot x$