A PARAMETRIC ANALYSIS FOR PROBABILISTIC LEXICOGRAPHIC LINEAR GOAL PROGRAMMING (PLLGP) PROBLEMS

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ABSTRACT

The purpose of this paper is to present a parametric analysis for the PLLGP problem, when one or more of the aspiration levels are random variables (R.V's) following the exponential or the normal dist's. The work can be relaxed to the deterministic case if we assume the aspiration levels as functions of deterministic variable. Using the mathematical concept of the feasibility condition in the multiphase simplex method, two algorithm are presented to investigate the feasible ranges of the aspiration levels for which the final solution of the model stays feasible.