Decomposition-Based Pricing Technique for Solving Large-Scale Mixed IP

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Abstract : Management sciences (MS), big group of companies and industries or government policies (GP) is affiliated with a huge number of decision ingredients and complicated restrictions. Every factor in MS, every product in Industries or decision in GP is not always bankable in practice. After formulating these models there arises large-scale mixed integer programming (MIP) problem. In this paper, we developed decomposition-based pricing procedure to filter the unnecessary decision ingredients from MIP where the variables in huge number will be abated and the complicacy of restrictions will be elementary. A real life numerical example has been illustrated to demonstrate the methods. We develop the computer techniques for these methods by using a mathematical programming language (AMPL).