Converting Integer Numbers from Binary to Unary Notation with P Systems

Miguel A. Gutiérrez-Naranjo[1], Alberto Leporati[2], Claudio Zandron[2]

[1] Research Group on Natural Computing
   Department of Computer Science and Artificial Intelligence
   Sevilla University
   Avda Reina Mercedes s/n, 41012 Sevilla, Spain
   E-mail: `magutier@us.es`
[2] Dipartimento di Informatica, Sistemistica e Comunicazione
   Università degli Studi di Milano – Bicocca
   Via Bicocca degli Arcimboldi 8, 20126 Milano, Italy
   E-mail: {`leporati,zandron`}`@disco.unimib.it`

Summary. Current P systems which solve **NP**–complete numerical problems represent instances in unary notation. In classical complexity theory, based upon Turing machines, switching from binary to unary encoded instances generally corresponds to simplify the problem. In this paper we show that this does not occur when working with P systems. Namely, we propose a simple method to encode binary numbers using multisets, and a family of P systems which transforms such multisets into the usual unary notation.

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