match no. 29

THE PROGRAM GENERAT

This program transforms the generating function

$$\prod_{i=1}^{n} (a_{i0} + a_{i1}x + + a_{im_{i}}^{m} x^{i})^{c_{i}}$$

$$\mathbf{b_0} + \mathbf{b_1}\mathbf{x} + \dots + \mathbf{b_k}\mathbf{x^k}$$

INPUT

The program asks for the name of an input file. Then it asks for the name of an output file.

The input file has to contain:

- A heading, max. 80 characters.
 The number of polynomials (n).
- 3. n times (i.e. i is to go from 1 to n): m_i a_{i0} a_{i1} ... a_{im} c_i

Here m_i is an integer, a_{i0} to a_{im_i} and c_i are real (extended).

1. to 3. may be repeated several times. EOF stops the computation. Note: The input file should not contain empty lines.

It was aimed at a simple and fast program, which nevertheless should be applicable to a wide range of practical cases in chemical enumerations, e.g. those of the examples in the present issue (pp. 131-142). Adapted for IBM-compatible PC. Available for USD 250.

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