# Input Interpretation

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This document explains how to interpret the contents of the input file.

Each file must begin with a number ,$m$, where the FFT is to be evaluated over the GF($2^m$). The next number must be $n$, the length of the FFT to be performed.
After that, each line must begin with "0" (to indicate the presence of a term). If the line begins with a "-1", this indicates that the end of the input was reached. After the 0's, the file contains the powers of Beta in DESCENDING ORDER. After the powers, a "-1" signals the end of the coefficient terms. The number after the "-1" is the degree in x.

The following is a sample input line with its interpretation.

"0 31 26 21 19 13 9 4 0 -1 15" can be interpreted as:
$(\beta^{31} + \beta^{26} + \beta^{21} + \beta^{19} + \beta^{13} + \beta^{9} + \beta^{4} + \beta^{0})x^{15}$