IND

PURPOSE

Compute an indicator function.

DESCRIPTION

Each element of a variable equal to some target value is set to 1 while all other elements are set to 0.

SYNTAX

LET <y2> = IND(<y1>,<tag>) <SUBSET/EXCEPT/FOR qualification>

where <y1> is a variable or a parameter;
<tag> is a number, parameter, or a variable which <y1> is compared to;
<y2> is a variable or a parameter (depending on what <y1> is) where the computed indicator function is stored;
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES

LET A = IND(14,4)
LET A = IND(A1,4)
LET X2 = IND(X1,4)
LET X2 = IND(X1-4,A2)

NOTE

In most cases, the target value is a single value so the second argument is typically a number or a parameter. However, if the second argument is a variable, then a pairwise test is made. That is, the element of the first argument is compared to the corresponding element of the second element.

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

ABS = Compute the absolute value of a number.
MOD = Compute the modulo (i.e., the remainder of x/y) of two numbers.
MIN = Compute the minimum of two numbers.
MAX = Compute the maximum of two numbers.
DIM = Compute the positive difference of two numbers.

APPLICATIONS

Data transformation

IMPLEMENTATION DATE

Pre-1987

PROGRAM

LET Y1 = DATA 1 4 9 16 25 4 22 7
LET TAG = 4
LET Y2 = IND(Y1,TAG)

The variable Y2 is set to 0 1 0 0 0 1 0 0.