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.