interrupted. The depth of GOSUB nesting allowed is limited by available memory space, and an OM error occurs if insufficient space remains.
Example: GOSUB 500

READ [variable1], [variable2]...
DATA [item1], [item2]...
RESTORE [line number]
READ assigns the specified variables the values from the next unused DATA command. The DATA items may be numbers or [Extended] strings; leading spaces are removed from unquoted string data. RESTORE allows DATA to be reused by resetting the DATA pointer to the specified line number, or to the beginning of the program if no line number is specified. An OD error occurs if a READ is executed when no more DATA are available, and an ID error occurs if DATA is used in direct mode.
Examples: READ X, Y
10 DATA 10, -20, 50
RESTORE 5000

FOR [variable] = [formula1] TO [formula2] STEP [formula3]
Indicates the beginning of a FOR / NEXT loop. First the initial value formula1 is assigned to the variable. The bound formula2 and increment formula3 are evaluated; if STEP [formula3] is omitted the increment is assumed 1. Then the command after the FOR is executed, unless either the increment is positive and the bound is less than the initial value, or the increment is negative and the bound is greater than the initial value. In that case the loop is not entered: XYBASIC scans through the program for the matching NEXT command and executes the command after it instead. A FR error occurs if the matching NEXT is not found.
Examples: FOR I = 1 TO 100
FOR I = 0 TO 30 * X STEP 10

NEXT [variable1], [variable2]...
Indicates the end of a FOR / NEXT loop. The increment is added to the current value of the matching FOR variable and the result is compared to the bound. If the loop continues, the command after the matching FOR is executed; otherwise the command after the NEXT is executed. A NF error occurs if NEXT is executed without a corresponding FOR or if the optional variable names given do not match.
Examples: NEXT
NEXT J, I

ON [formula] GOTO [line number], [line number]...
ON [formula] GOSUB [line number], [line number]...
Transfers control to the Ith line number in the list, where I is the truncated value of the formula. An ON error occurs if the value of I is less than one or greater than the number of line numbers in the list.
Examples: ON I GOTO 100,200,300
ON (N MOD 2) + 1 GOSUB 1000, 2000

DIM [variable] (formula, ...)
Allocates space for an array with name specified by variable, and initializes all array elements to zero or [Extended] the null string. A DD error occurs if an array is DIMensioned more than once. A BS error occurs if the value of a subscript is less than zero or greater than the given array bound. An OM error occurs if the array is too large for remaining free memory.
Example: 10 DIM A(100,10), B(N*2)