

The following example uses a two-dimensional array. First each element is given an initial value computed from its subscripts, then the array is printed.

```

NEW
OK
10 DIM A(5,4)
20 FOR I = 0 TO 5
30 FOR J = 0 TO 4
40 A(I,J) = 10*I + J
50 NEXT J,I
60 FOR I = 0 TO 5
70 FOR J = 0 TO 4
80 PRINT A(I,J),
90 NEXT J
100 PRINT
110 NEXT I
RUN
      0      1      2      3      4
    10      11      12      13      14
    20      21      22      23      24
    30      31      32      33      34
    40      41      42      43      44
    50      51      52      53      54
OK

```

If you use an array element in your program before executing a DIM statement to define the array, a SN (SyNtax) error will occur because XYBASIC will not understand the subscript. If the value of a subscript expression is less than zero or greater than the size of the array declared in its DIM statement, a BS (Bad Subscript) error will occur.

In Extended XYBASIC, any floating point values you use to specify array DIMensions or subscripts will be truncated to integer values automatically, as described under Conversions in Section 3.

#### Multiple Commands Per Line

The special character : (colon) lets you include more than one command on a single line by just putting a : between each command. For example, you could rewrite the ON / GOTO example given above as follows:

```

NEW
OK
10 INPUT "WHICH NUMBER (1-4) DO YOU WANT" X
20 ON X GOTO 30, 50, 70, 90
30 PRINT "ONE" : END
50 PRINT "TWO" : END
70 PRINT "THREE" : END
90 PRINT "FOUR" : END
RUN
WHICH NUMBER (1-4) DO YOU WANT? 2
TWO
OK

```