

You can use NEXT without specifying the FOR variable, and let XYBASIC find the most recent FOR automatically:

```
60 NEXT
```

A variation of the FOR command lets you use an increment other than 1. Try changing the example given above:

```
20 FOR I = 1 TO 10 STEP 2
RUN
THE SQUARE OF 1 IS 1
THE SQUARE OF 3 IS 9
THE SQUARE OF 5 IS 25
THE SQUARE OF 7 IS 49
THE SQUARE OF 9 IS 81
OK
```

Notice that now each NEXT I increments I by 2 instead of 1. You can use any number, variable or formula to specify the increment with STEP, but the value of the increment is computed only once (when the FOR command is executed). Similarly, the value of the bound specified by TO is computed only once. If the value of the increment is negative, XYBASIC steps backwards through the values:

```
20 FOR I = 10 TO 1 STEP -2
RUN
THE SQUARE OF 10 IS 100
THE SQUARE OF 8 IS 64
THE SQUARE OF 6 IS 36
THE SQUARE OF 4 IS 16
THE SQUARE OF 2 IS 4
OK
```

Sometimes you might make a mistake in constructing a FOR loop and try to execute a NEXT command without a corresponding FOR. If you do, a NF (Next without For) error will occur, as shown in the following example.

```
NEW
OK
10 PRINT "NF EXAMPLE"
20 NEXT I
RUN
NF EXAMPLE

NF ERROR: 20 NEXT
      I
OK
```

The variable you use to control a FOR loop must be a simple numeric variable such as I; an SN (SyNtax) error will occur if you try to use an array element such as A(I) instead.

You will frequently want to nest one FOR loop within another, as in the following example.