FRE

Storing your current XYBASIC program uses part of your computer's memory. Each variable in your program uses memory too. Executing some commands (such as FOR and GOSUB) uses memory to store information needed later. You can use the function FRE to find out how much free memory space you have left. If you type

```
PRINT FRE
 20893
OK
```

then XYBASIC will respond by printing the number of bytes still available. Of course the number XYBASIC prints when you try this depends on the memory configuration of your computer system.

In Extended XYBASIC you can use the similar function FRE$ to find how much space you have left to store strings. FRE$ is described in Section 4 below.

The space used by FOR and GOSUB commands is reclaimed when the loop or subroutine is completed, as the following program shows.

```
NEW
OK
10 PRINT FRE; "BYTES FREE INITIALLY"
20 FOR I = 1 TO 2
30 PRINT FRE; "BYTES FREE INSIDE FOR LOOP"
40 GOSUB 100
50 NEXT I
60 PRINT FRE; "BYTES FREE AFTER LOOP"
70 GOSUB 100
80 PRINT FRE; "BYTES FREE BEFORE STOP"
90 END
100 PRINT FRE; "BYTES FREE INSIDE GOSUB WITH I ="; I
110 RETURN
RUN
 15489 BYTES FREE INITIALLY
 15466 BYTES FREE INSIDE FOR LOOP
 15461 BYTES FREE INSIDE GOSUB WITH I = 1
 15466 BYTES FREE INSIDE FOR LOOP
 15461 BYTES FREE INSIDE GOSUB WITH I = 2
 15481 BYTES FREE AFTER LOOP
 15476 BYTES FREE INSIDE GOSUB WITH I = 3
 15481 BYTES FREE BEFORE STOP
OK
```

You can see from the example that the space used by the commands is recovered. Of course the values printed will depend on the size of your computer system's memory, as noted above.

The value of FRE is really an unsigned 16-bit representation. If your system has more than 32K of free memory, you should always use the UNS function (described below) when PRINTing FRE:

```
PRINT UNS (FRE)
```