Example: The body of the concatenation program is listed below. Assuming that two separate numbers are given in the X- and Y-registers, program lines 002 to 008 below will concatenate those two 16-bit words into one 32-bit word. The word initially in the X-register will become the most significant bits of the result.

Keystrokes	Display		
[HEX]	002–	23	
2	003–	2	Doubles the word size from 16 to 32, providing 16 extra bits to the left of the numbers in X and Y.
0	004–	0	
[f] [WSIZE]	005–	42 44	
[g] [LSTx]	006–	43 36	Brings back word size (32).
[f] [SR]	007–	42 b	Computes one-half of word size (16).
[f] [RLn]	008–	42 E	Shifts number left 16 bits.
[f] [OR]	009–	42 40	OR operation here concatenates the contents of X and Y.

Ending a Program.

- The instruction [g] [RTN] (*return*) will end a program, return to line 000, and halt.* This instruction can be omitted if the program is the last one in memory, since the end of the program memory contains an automatic [RTN].
- The instruction [R/S] (*run/stop*) will stop a program *without* moving the line position to line 000.

Keystrokes	Display		
[g] [RTN]	010–	43 21	Optional if this is the last program in memory.

* Except when a subroutine return is pending, as discussed in section 9, page 94.