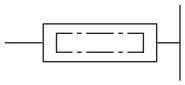
6.6 Termination Instructions

Ending the main routine program

FEND

FX5S FX5UJ FX5U FX5UC

This instruction is used to branch operation of the sequence program by the CJ instruction or to divide the main routine program into a subroutine program or an interrupt program.

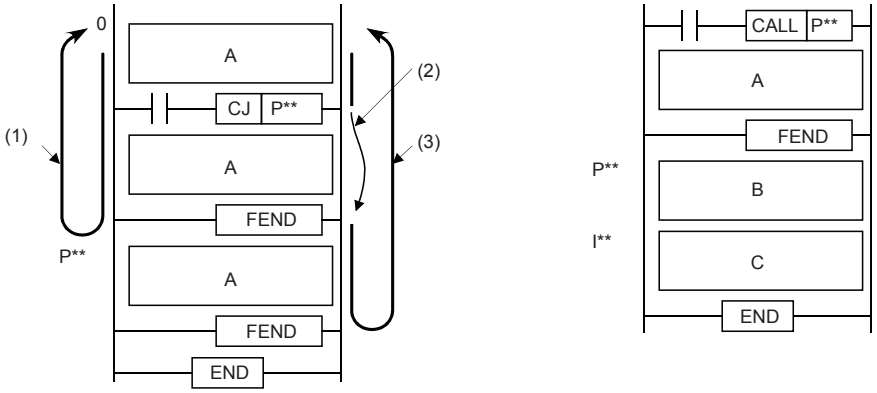
Ladder diagram	Structured text
	Not supported.

FBD/LD
Not supported.

Processing details

- This instruction branches operation of the sequence program by the CJ instruction or dividing the main routine program into subroutine programs and interrupt programs.
- When this instruction is executed, program execution returns to the program at step 0 after output processing, input processing and refreshing of the watchdog timer.
- The sequence program from this instruction onwards can also be displayed as ladder by the engineering tool.

(Left: When the CJ instruction is used, Right: When there are subroutine programs and interrupt programs)

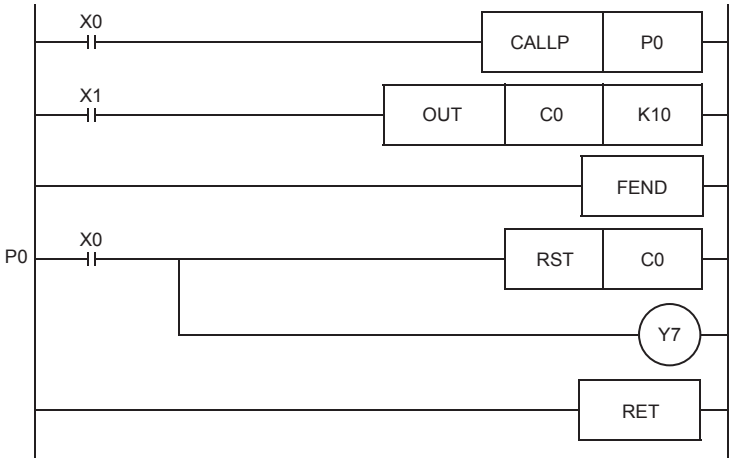


A: Main routine program
B: Subroutine program
C: Interrupt Program
(1): Operation when the CJ instruction is not executed
(2): Jump by the CJ instruction
(3): Operation when the CJ instruction has been executed

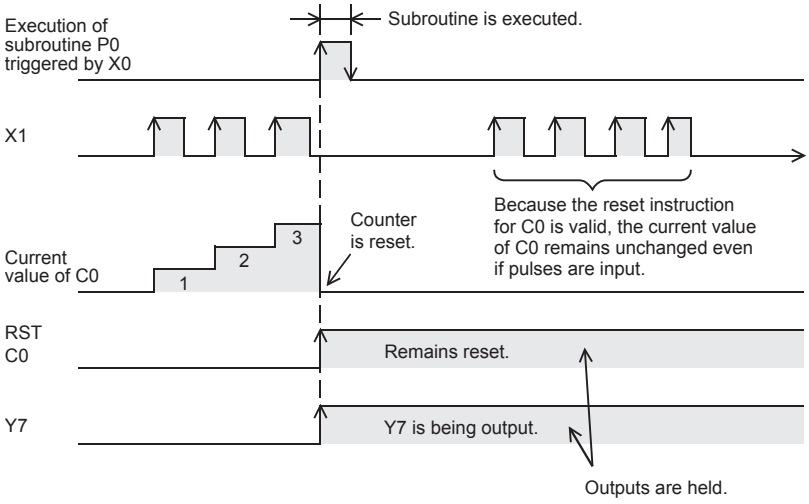
Program example

• Example in which outputs in the subroutine are latched

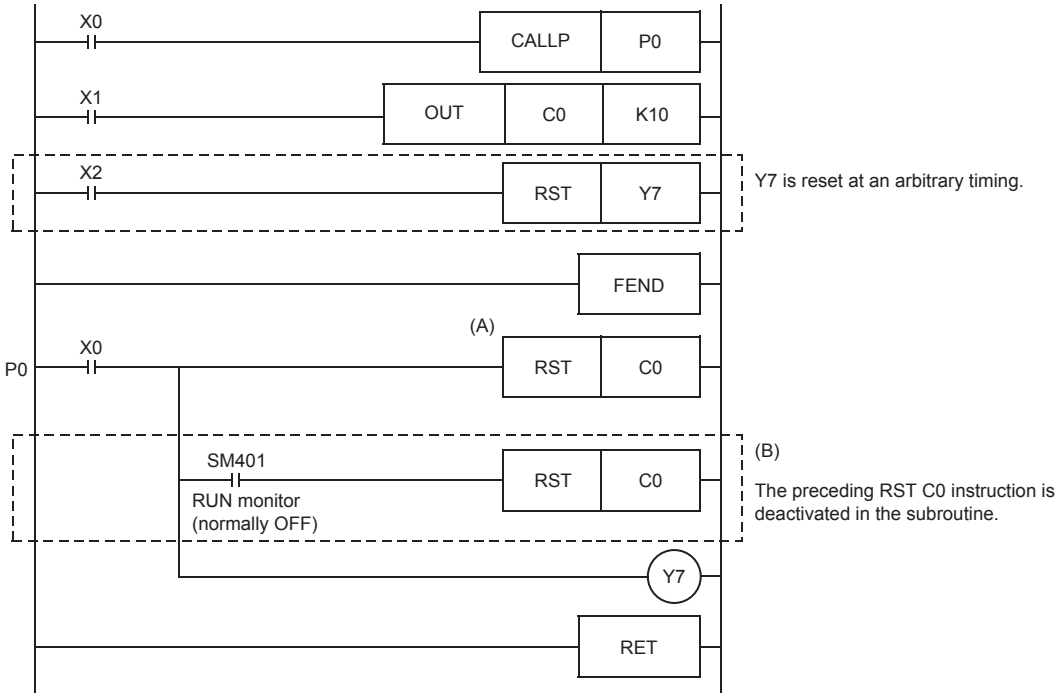
In the following program example, the counter C0 is provided to count X1. When X0 is input, the subroutine P0 is executed only in one scan, and then the counter is reset and Y7 is output.



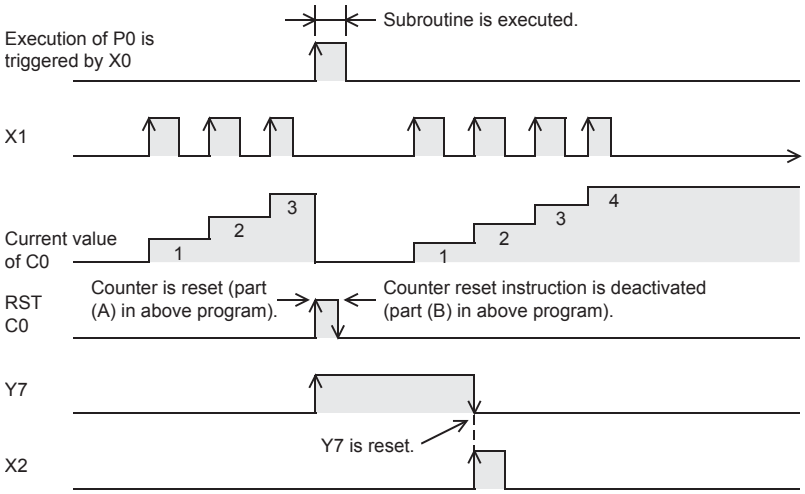
Timing chart



• Example for resetting outputs in the subroutine



Timing chart



Operation error

Error code (SD0/SD8067)	Description
3340H	The FEND instruction is executed before the NEXT instruction after the FOR instruction is executed.
3381H	The FEND instruction is executed before the RET instruction after the CALL(P) instruction is executed.
33E3H	The FEND instruction is programmed between FOR-NEXT.
33E4H	The FEND instruction is programmed between MC-MCR.
33E5H	The FEND instruction is programmed between STL-RETSTL.
33E7H	The FEND instruction is programmed between I-IRET.
3100H	The FEND instruction is programmed in standby type program.
	The FEND instruction is programmed in FB file.