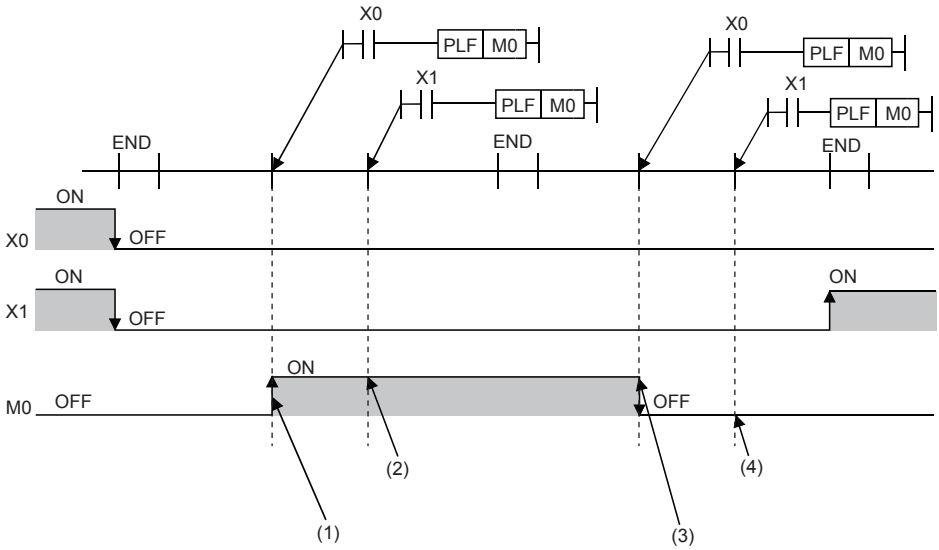
• If the on-to-off changes of X0 and X1 are at the same timing



(1) Since X0 turns off, M0 turns on.
(2) Since X1 turns off, M0 remains on.
(3) Since X0 is other than turning off, M0 turns off.
(4) Since X1 is other than turning off, M0 remains off.

If output (Y) is specified using a PLF instruction, the on/off state of the last PLF instruction executed during the one scan will be output.

2.4 Handling general flags

In some types of instructions, the following flags operate:

- SM8020: Zero flag
- SM8021: Borrow flag
- SM8022: Carry flag
- SM8029: Instruction execution complete flag
- SM8090: Block comparison signal
- SM8304: Zero flag (MUL, DIV instructions only)
- SM8306: Carry flag (MUL, DIV instructions only)
- SM8328: Instruction non-execution flag
- SM8329: Instruction execution abnormal end flag

These general flags turn ON or OFF every time instructions turn ON, but do not change when various instructions turn OFF or when errors occur.

Because multiple instructions change the status of these flags, the ON/OFF status of flags change every time such instructions are executed.

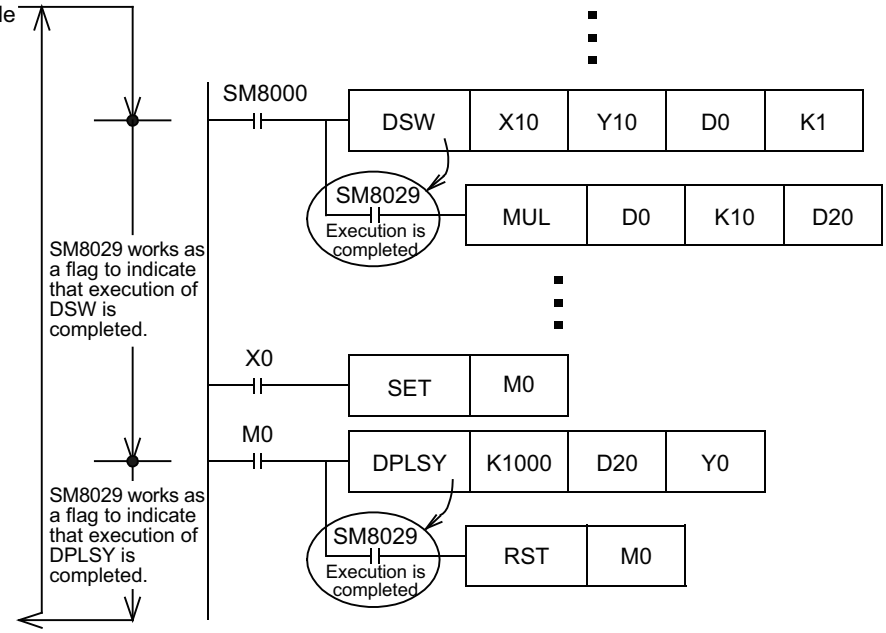
Program general flag contacts directly under each instruction. (☞ Page 46 Program containing many flags (example of SM8029 (Instruction execution complete flag)))

Program containing many flags (example of SM8029 (Instruction execution complete flag))

When two or more SM8029 (Instruction execution complete flag) are programmed together for instructions which operate the same flag, it is difficult to determine which instruction executes which flag. Also, the flag corresponding to each instruction cannot be read normally.

For using flags in any positions other than directly under instructions, refer to ☞ Page 47 Method for using flags in any positions other than directly under instructions (example of SM8029 (Instruction execution complete flag)).

Good example



Bad example