

LECTURE - 11

Move /Logical

MOV (Move)

MVM (Move with Mask)

AND (AND Gate logic)

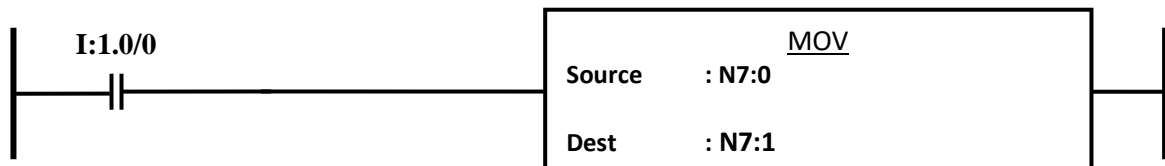
OR (OR Gate Logic)

XOR (XOR Gate Logic)

NOT (NOT Gate Logic)

CLR (Clear)

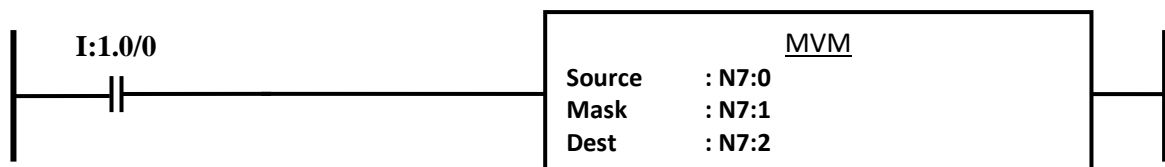
MOV (MOVE)



When rung conditions preceding this instruction are true, the MOV instruction moves a copy of the source to the destination each scan. The original value remains intact and unchanged in its source location.

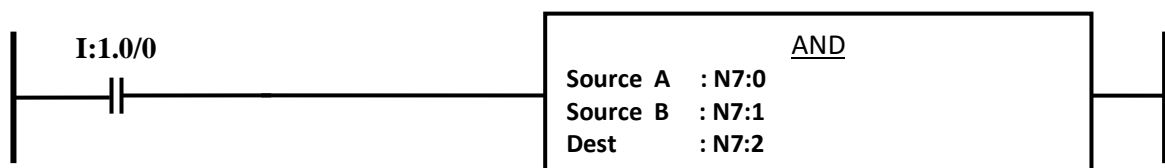
Ex:: N7:0=2 will be moved to N7:1=2.

MVM (MASKED MOVE)



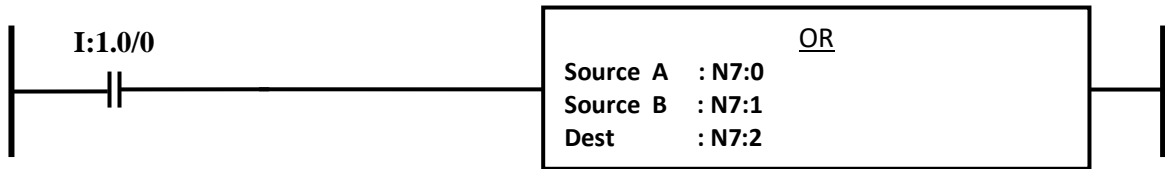
When rung conditions are true, the MVM instruction moves data from a source location to a destination, and allows portions of the destination data to be masked by a separate word. Data at the source address passes through the mask to the destination address. As long as the rung remains true, the instruction moves the same data each scan.

AND (AND LOGIC)



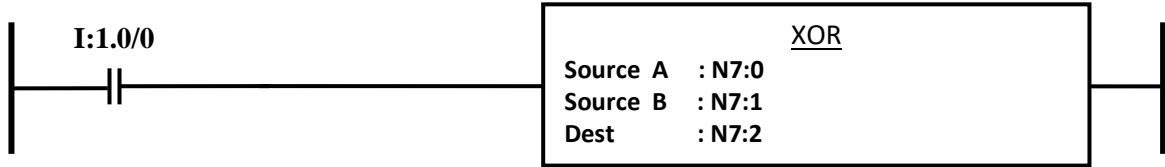
When rung conditions are true, sources A and B of this output instruction are ANDed bit by bit and stored in the destination.

OR (OR LOGIC)



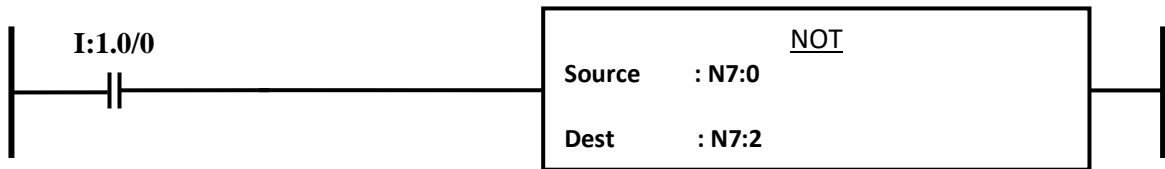
When rung conditions are true, Sources A and B of the OR instruction are ORed bit by bit and stored in the destination.

XOR (XOR LOGIC)



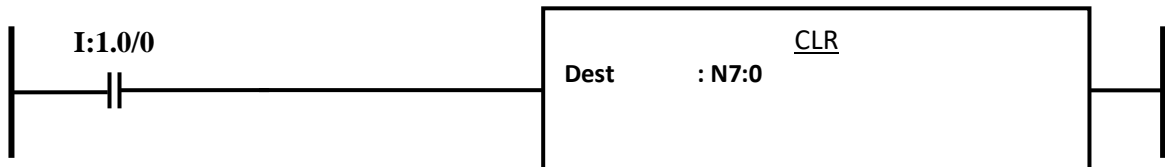
When rung conditions are true, Sources A and B of the XOR instruction are Exclusive ORed bit by bit and stored in the destination.

NOT (NOT LOGIC)



When rung conditions are true, the source of the NOT instruction is NOTed bit by bit and stored in the destination.

CLR (CLEAR)



When rung conditions are true, this output instruction sets all the bits in a word to zero. The destination must be a word address.