

LECTURE - 10

Compute / Math

CPT (Compute)

ADD (Addition)

SUB (Subtraction)

MUL (Multiplication)

DIV (Division)

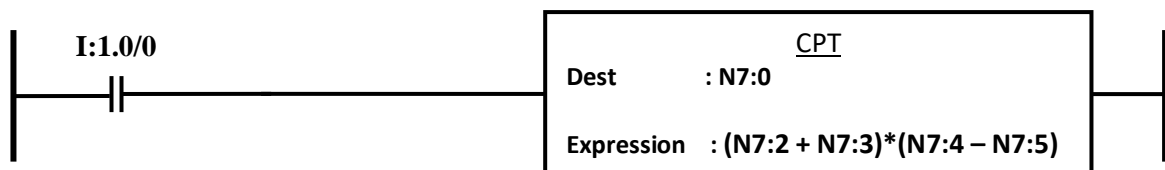
SQR (Square Root)

NEG (Negative)

TOD (To BCD)

FRD (From BCD)

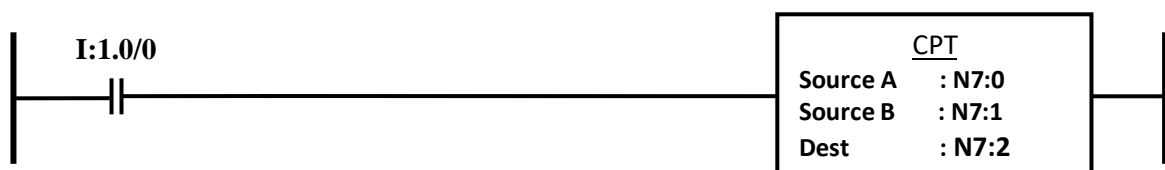
CPT (COMPUTE)



The formula or mathematical expressions written in expression will be evaluated and the result will be stored in the destination.

Ex:: N7:2=2, N7:3=3, N7:4=10, N7:5=5 then N7:0 will display the result that is 25.

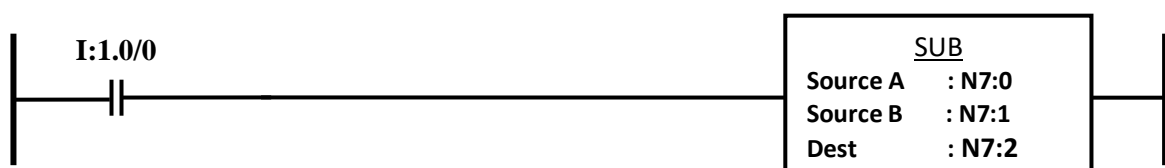
ADD (ADDITION)



The value of N7:0 will be added to the value of N7:1 and the result will be stored in the destination.

Ex:: N7:0=10, N7:1=10 then N7:2 will display the result that is 20.

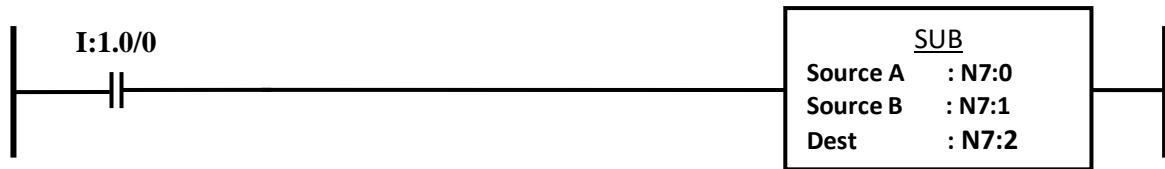
SUB (SUBTRACTION)



The value of N7:1 will be subtracted from the value of N7:0 and the result will be stored in the destination.

Ex:: N7:0=10, N7:1=5 then N7:2 will display the result that is 5.

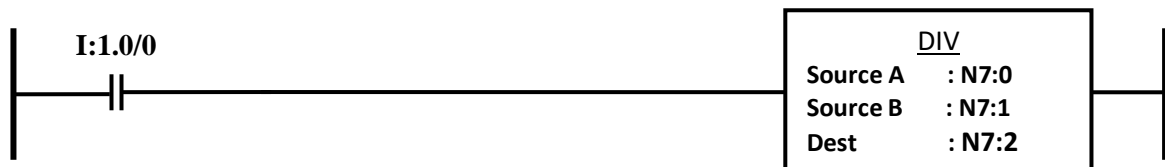
MUL (MULTIPLICATION)



The value of N7:0 is multiplied with the value of N7:1 and the result will be stored in the destination.

Ex:: N7:0=10, N7:1=5 then N7:2 will display the result that is 50.

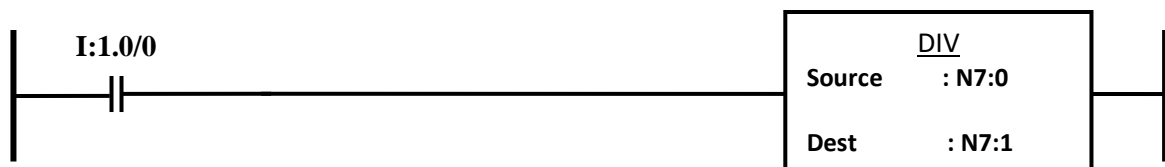
DIV (DIVISION)



The value of N7:0 is divided by the value of N7:1 and the result will be stored in the destination.

Ex:: N7:0=10, N7:1=5 then N7:2 will display the result that is 2.

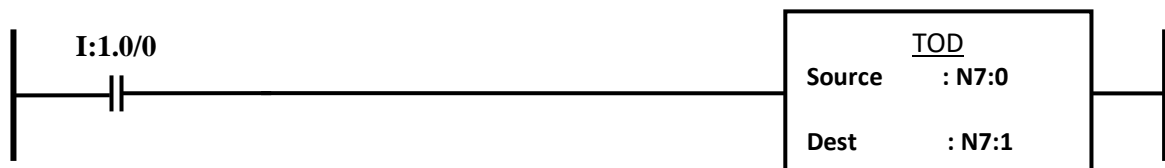
SQR (SQUARE ROOT)



The value of N7:0 is square rooted and the result will be stored in the destination N7:1.

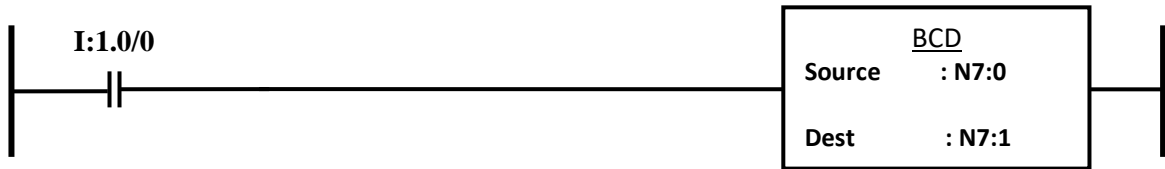
Ex:: N7:0=4 then N7:1 will display the result that is 2.

TOD (TO BCD)



When rung conditions are true, this output instruction converts a 16-bit integer source value to BCD and stores it in the math register or the destination.

FRD (FROM BCD)



When rung conditions are true, this output instruction converts a BCD value in the math register or the source to an integer and stores it in the destination.