

PREMIER UNIVERSITY CHITTAGONG



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Course code : EEE 314

Course Title : Control System Laboratory

Report No : 03

Name of Report : To observe TON & TOF time and NAND, NOR gates operation.

Date of Performance : 20.10.2019

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Remarks

Submitted By

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Objective: To observe TON & TOF time and NAND,NOR gates operation.

Tools:

1. PLC Software.
2. CPU 1212C DC/DC/DC.
3. Siemens S7-1200 PLC CPU
4. Circuit Board.

Ladder Diagram:

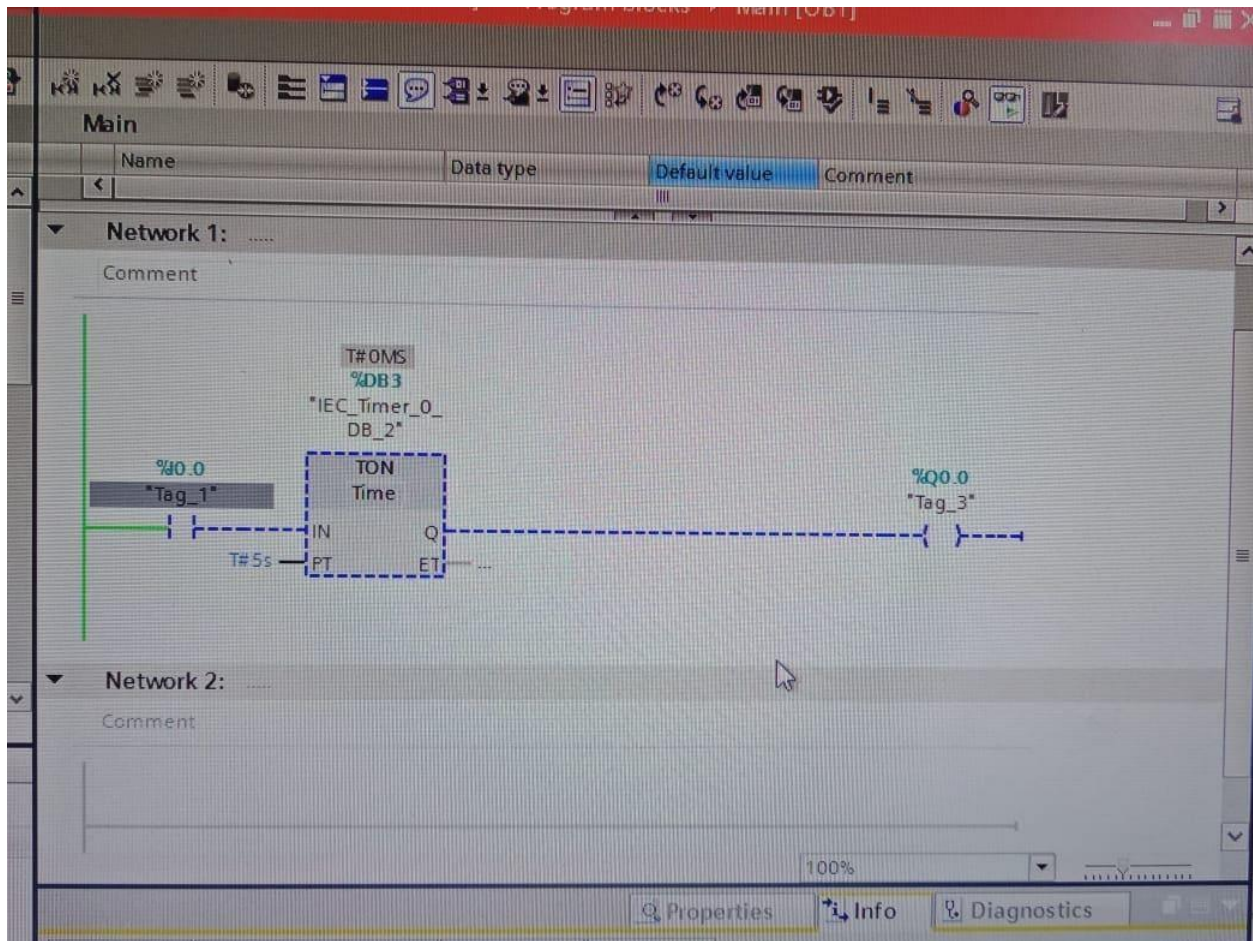


Fig: Ladder Diagram In TON Time.

In diagram i=0.0,t=5s and q=0.0.

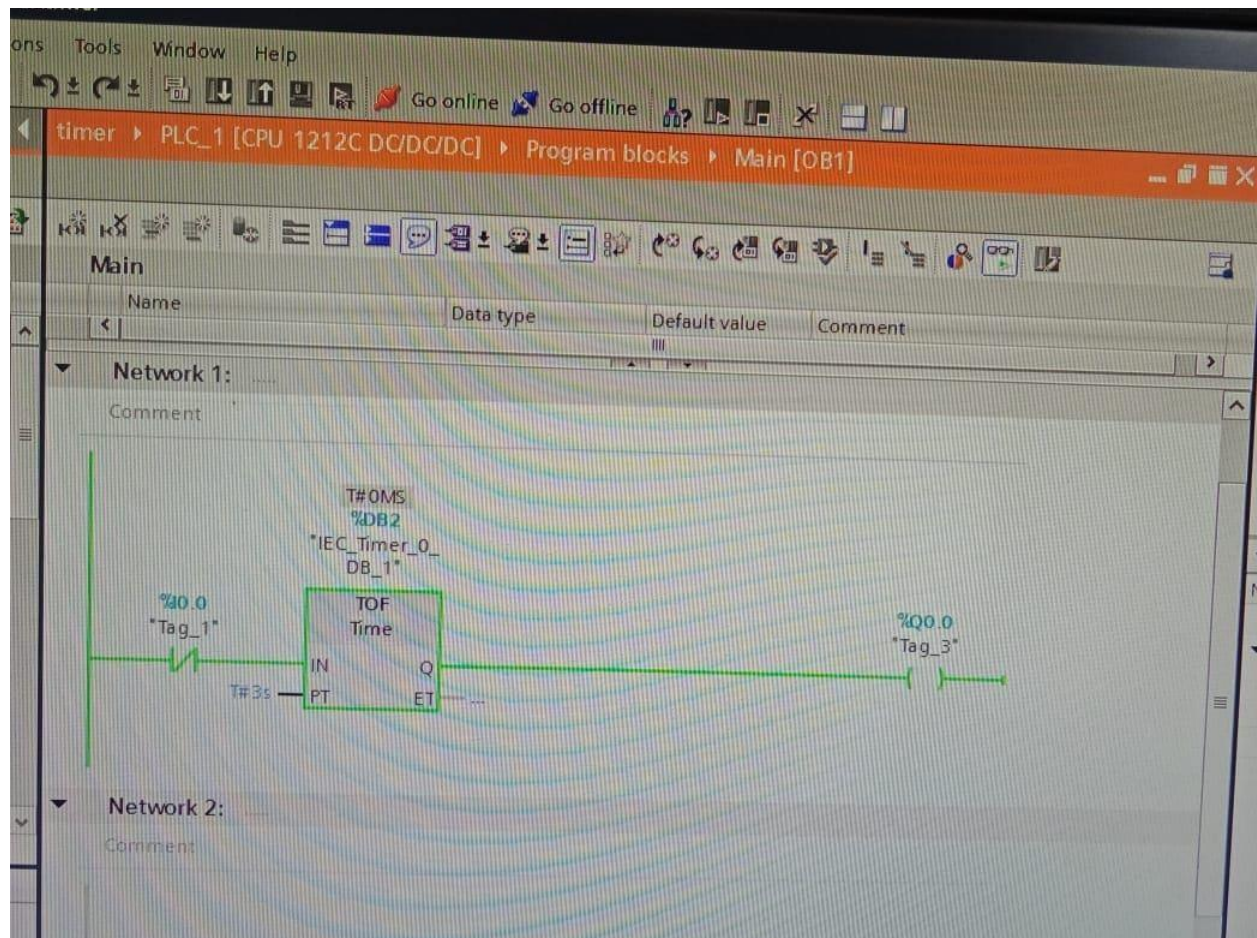


Fig: Ladder Diagram In TOF Time.

In diagram $i=0.0, t=3s$ and $q=0.0$.

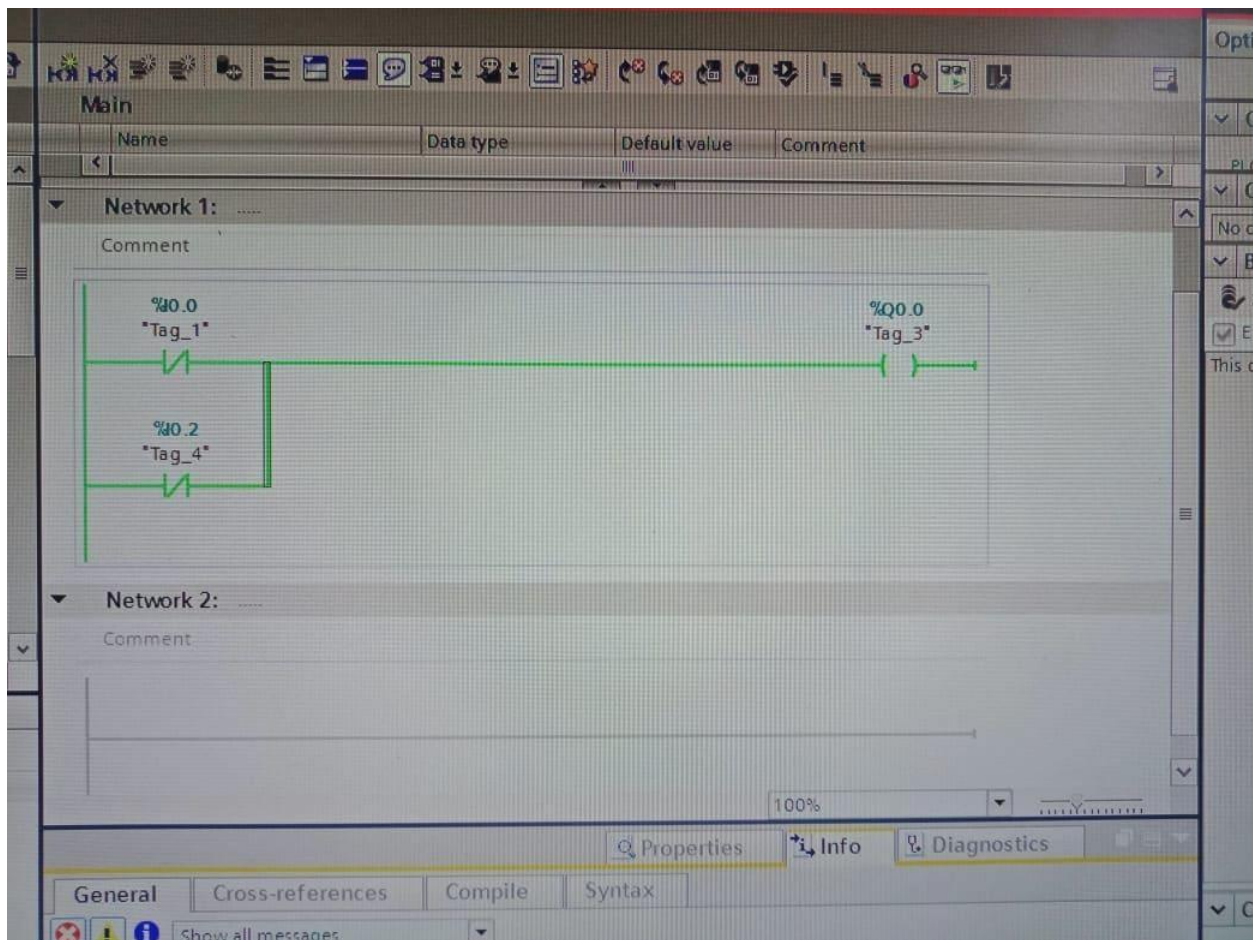


Fig: Ladder Diagram In NAND gate.

In diagram $i=0.0, i=0.2$ and $q=0.0$.

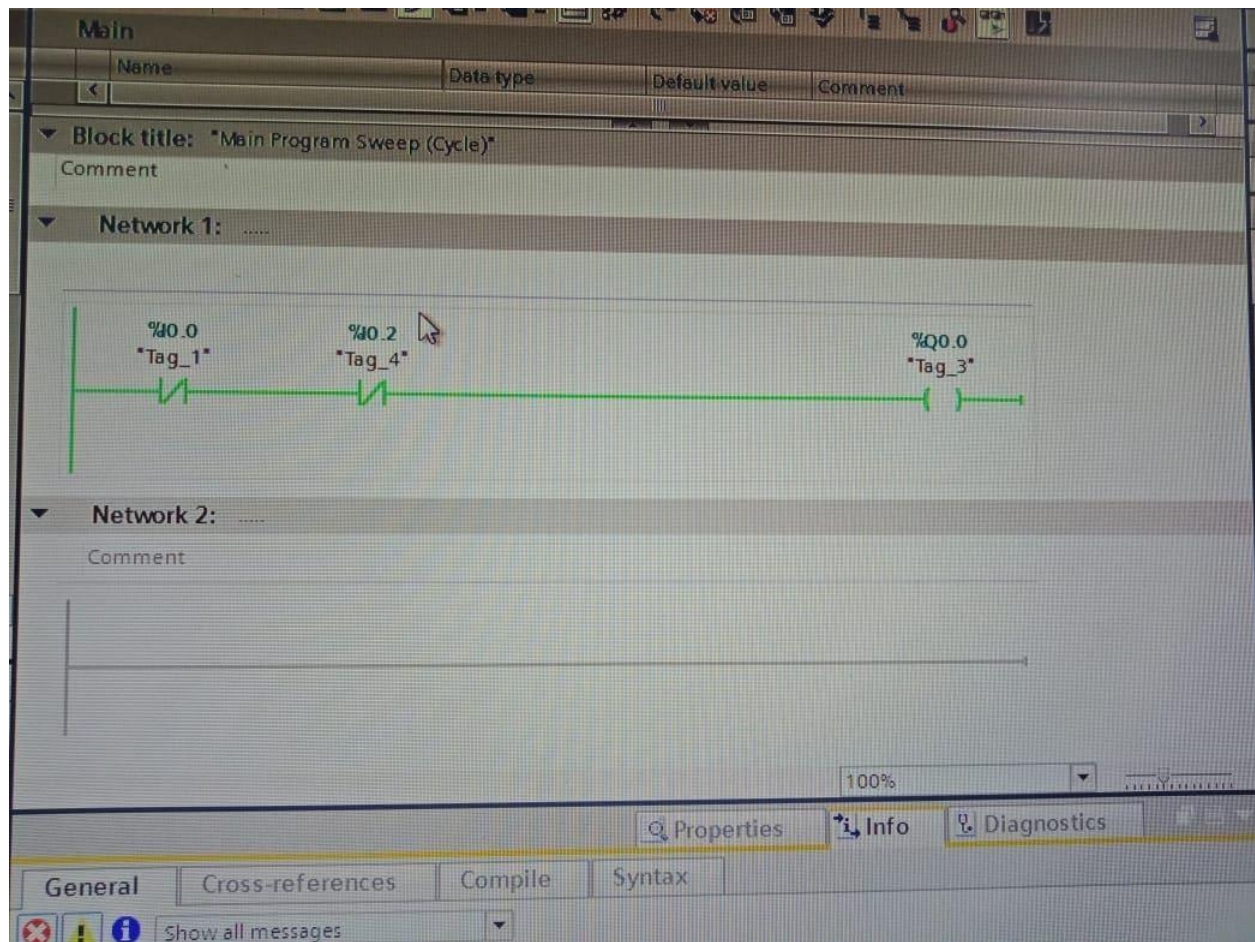


Fig: Ladder Diagram In NOR gate.

In diagram $i=0.0$, $i=0.2$ and $q=0.0$.

Discussion : First of all I opened the PLC software and then I created a project to do work. I selected CPU 1212C DC/DC/DC and Siemens S7-1200 PLC CPU as tools. I used circuits in which circuit logics are included. These way is more efficient for the industrial area to do the industrial work, These are better than the manual system for the industrial area.