

PLC128 LAB 1.1: ALLEN BRADLEY COMPACTLOGIX TIMER INSTRUCTIONS

Student Name: _____

Student ID: _____

LAB OUTCOMES:

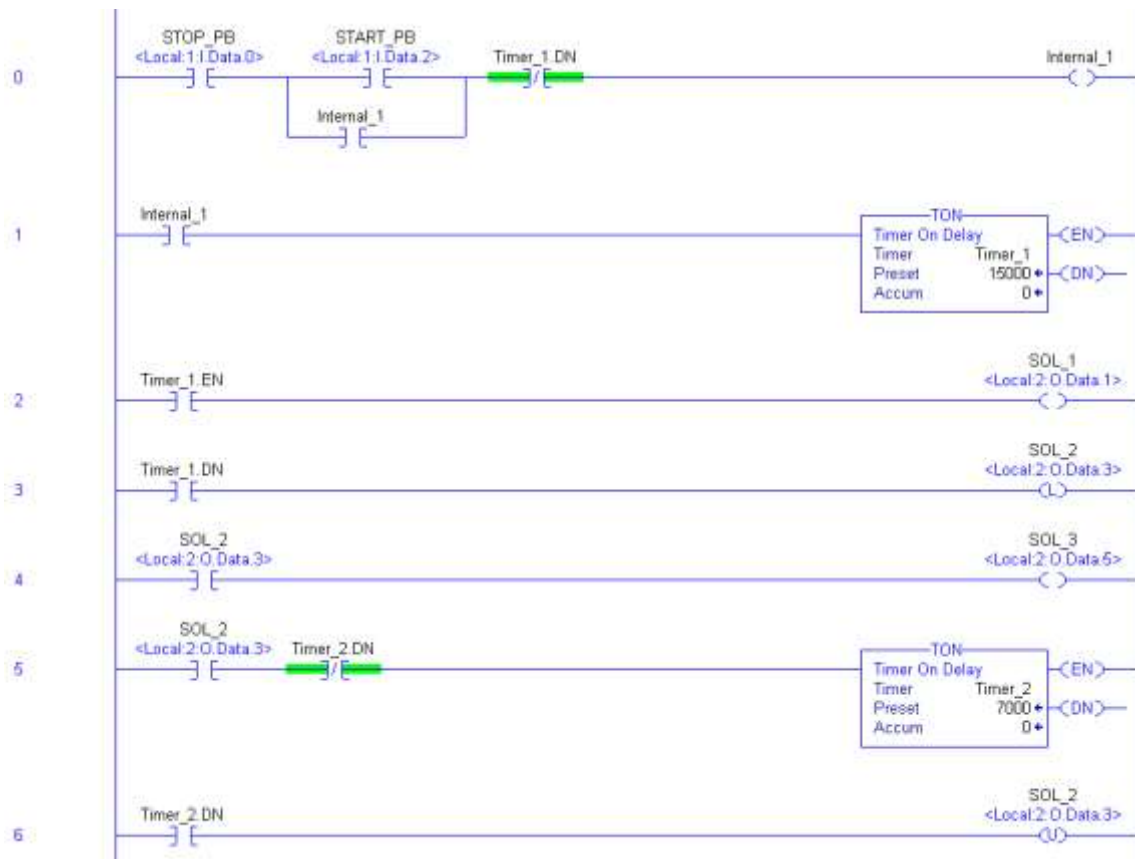
1. Explain the operation of a TON instruction and the associated status bits
2. Explain a program operation after viewing it and running it on a PLC
3. Demonstrate how to modify a project for a specified operation

LAB PROCESS:

Key in the Alias tags for the Base I/O Tag addresses. Write the program with RSLogix5000 as shown in part 1 and then save it to the hard drive of the computer. You will then download the program to the ControlLogix processor. Once that it is complete you will go online with the ControlLogix and place the processor in RUN mode.

Part 1

1. Key in the following program and save it to the hard drive. Name the project something you will be able to easily remember.



2. Make sure the STOP_PB is pulled out, so the XIC instruction on rung 0 has highlight.
3. Push the START_PB input to initiate the program.

Explain how the 3 outputs operate once the START_PB is pushed.

4. What Timer controls the amount of time SOL_1 is on?

What timer controls the amount of time SOL_2 is on?

5. When does the Internal_1 tag (bit) shut off?

6. Why is an OTL instruction used in rung 3 for SOL_2?
7. Modify the program so that if Selector Switch 7 (Local:1:I.Data.7) is turned on, it will reset everything in the program.

Questions

1. Do any instruction (contacts or coils) have highlight when you pull the STOP_PB out?

Which ones?

2. Why do SOL_2 (Local:2.O.Data.3) and SOL_3 (Local:2.O.Data.5) coils stay on even after the inputs are off? Explain.

The outcomes of this exercise (listed on page 1) specifies the skills that the Student must demonstrate to the Instructor. Once the Instructor is satisfied with the demonstration of Knowledge & Skills by the individual student, they will sign this document (for the student), then enter a 100% into the Hands-On Lab grade in Sakai.

I verify that this student has completed all of the requirements of this Hands-On Assessment:

Student Name: _____

Faculty Signature: _____ Date: _____

DOL DISCLAIMER:

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