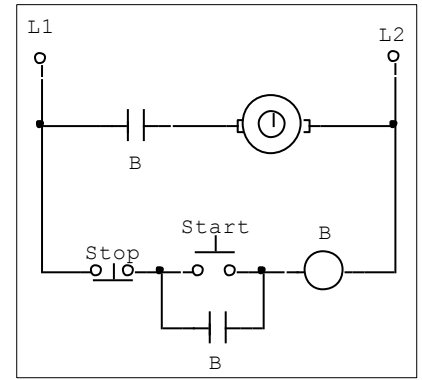
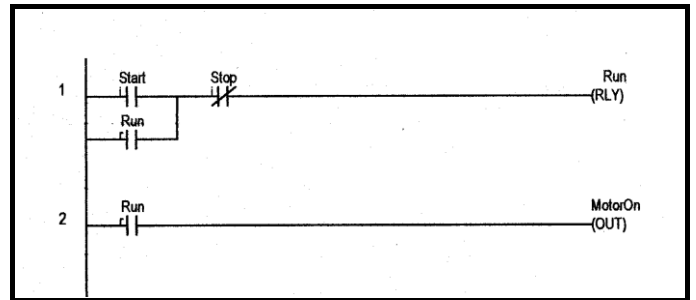


ET 350 Lab 13 PLC Introduction

1. The circuit in Fig. 1 is in relay logic:



2. The same circuit must be recreated in ladder logic as Fig. 2:



3. Begin by starting TriLogi 3.5 and choosing the correct PLC (E10 NPN+.) Next click F2 and create the following Input/Output table as in Fig. 3:

I/O #	Inputs	Outputs	Relays
1	Start	MotorOn	Run
2	Stop		
3			

4. Begin drawing the circuit by clicking Spacebar and then using the drawing tools to create the circuit in Fig. 2. (Note: Use right mouse to select normally closed components. Sometimes remove green connection boxes to make connections. Press Enter to complete ladder rungs.)

5. From the Simulate menu, pick Run; Run will also compile the circuit.

6. Connect the computer to the PLC. The PLC must be powered by at least 20-24V.

7. From the Controller Menu, pick Program Transfer to PLC.

8. Execute the program in hardware.