

Programming Programmable Logic Controllers with RSLOGIX 500

Homework and Laboratory Assignments:

1. Review the program on page 43 in the loose leaf lab notebook (lln).
 - Create and verify the program using RSLOGIX.
2. Use Internal Coils Addressing and implementations.
3. Connect input (switches) and output (3 phase motor starter) devices and test the program in the run mode.
 - *** DO NOT CONNECT AC SUPPLY TO PLC INPUTS OR OUTPUTS **
 - Use solid state relays to interface the plc to the AC supply.
 - Example connection diagram on page 41 and 42 (lln).
 - Create an “external connection diagram”.
 - Demonstrate the operating circuit to the instructor. The instructor will sign off on your connection diagram.
4. Create program report and print it. Create an input, output, and internal coil address assignment table. Include the “external connection diagram”. Turn them in to the instructor. Be sure the program contains title, comments, and device descriptions. All pages should have names, date, and title/description of material presented. ASSIGNMENT DUE DATE: _____
5. Latch and Unlatch Coils. Review and create the programs on page 44 and 45 (lln).

QUESTIONS To answer:

 - What is the difference between a “normal coil” and a “latching coil”?
 - How are latching coils turned “on” or “off”? (show with explanation and examples)
 - Why would it be better to use a latching coil rather than a “normal” coil?
 - How would the circuits be modified to include jog functions in both directions?
6. Complete the program on pages 118 - 120 in the PLC Textbook

It is expected that the student use time resources to their advantage. Please review the course syllabus about arriving late to class or leaving early. Log entries should represent the amount of time spent completing the assignments in **and out** of lab.