EET263 Lab2 Seal In Circuit

Sometimes in industry a powerful and potentially dangerous process is only started when an operator presses two start buttons. This ensures both arms of the operator are in a designated area before the process starts. Another requirement could easily be that the process continues even when the buttons are released. If a seal-in is required the process continues to run even if the operator hits the two start buttons again. To stop the process an additional button can be add to the system wiring and ladder logic program to stop the process. This is very similar to the SR latch.

For this lab wire-up the red and green stack light to two PLC outputs. Also, wire-up three SPDT momentary pushbutton switches to three PLC inputs. You choose inputs and outputs.

Write a program on the MicroLogix 1100 to satisfy the following requirements:

- When user presses both start buttons green light comes on.
- When process is running green light stays on even if user hits start buttons again.
- If user hits stop button green light goes out and red light comes on.
- User can now start process by hitting both start button again.