The exercise today is to wire up a sensor, a switch, and a lamp to a pre-programmed PLC. The PLC performs the same latching logic you wired with a relay last week. The X0 input is ON and the X1 input is OFF. The Y0 output is the lamp. The sensors is a small inductive proximity sensor, and the switch is the normally-open pushbutton you used before. Data sheet for the inductive sensor is attached.

You need to wire the sensor and switch to the triple-level terminal blocks. The bottom level should be ground, the middle level +24V, and the top level output of the sensor or switch. The sensor is SINKING (NPN) type. The PLC output is also SINKING. Use a block of red one-level terminals for +24V distribution, and a block of black one-level terminals for GND distribution.

