

# University of Jordan School of Engineering Department of Mechatronics Engineering Automation and Process Control Lab (0908462) I/O Assignment Table

A set of guidelines should be followed during PLC program organization and implementation in order to develop an organized system. Approach guidelines apply to two major types of projects:

- New applications M
- Modernizations of existing equipment.

Flow charting can be used to plan a program after a written description has been developed. A flowchart is a pictorial representation of the process that records, analyzes, and communicates information, as well as defines the sequence of the process.

Two important documents that provide information about the arrangement of the PLC system are the I/O assignment table and the internal address assignment table.

- 1. The I/O assignment table documents the names, locations, and descriptions of the real inputs and outputs.
- 2. The internal address assignment table records the locations and descriptions of internal outputs, registers, timers, counters, and MCRs.



Figure 1 shows the proper wiring with addresses in PLC.

The I/O assignment table documents the names, locations, and descriptions of the real inputs and outputs.

An example of I	O Address Assignment Table:
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Input Listing	Address	Output Listing	Address
Inductive Sensor	X0	Pilot Light	Y0
Reed Sensor	X1	Small DC Motor	Y1
Capacitive Sensor	X2	Solenoid Valve	Y3
Pushbutton	X3		

## **Objective**

To be familiar with the I/O assignment table preparation basics.

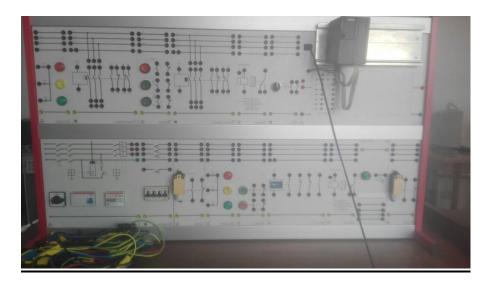
### **Pre-lab Preparation:**

Read Chapter 2+3+4

## **Procedure:**

This lab experiment is composed of four parts.

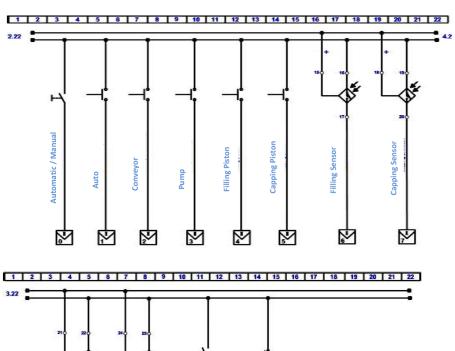
## Part 1(Motor Control Establishing a new system)

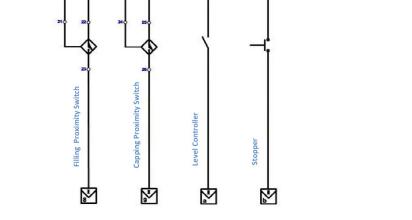


Exercise 1
Fill the following I/O assignment table:

Part 2 (Filling Machine Reading Wiring Diagram)







Exercise 2: Fill the following I/O assignment table:

# Part 3(Elevator Software Assistance)



# Exercise 3:

Fill the following I/O assignment table:

# Part 4 (Traffic Light Multimeter)



# Exercise 4

Fill the following I/O assignment table: