

PLC130 LAB 1.2: SEQUENCER OUTPUT INSTRUCTION

Student Name: _____

Student ID: _____

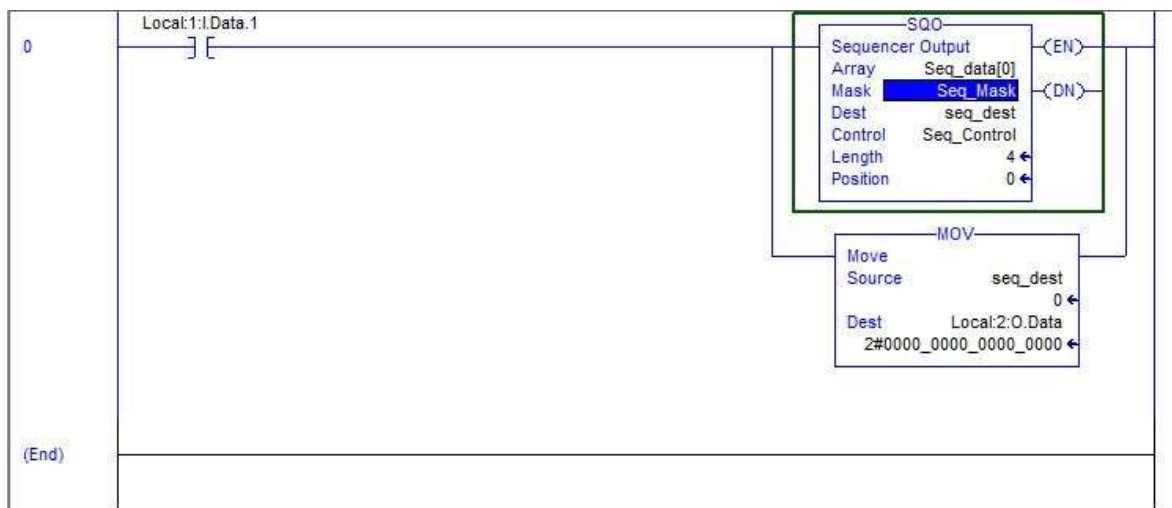
LAB OUTCOMES:

1. Explain how the SQO instruction moves data within a data array
2. Explain the Data types use within a Sequence Control Tag

LAB PROCESS:

Download the project "Compact_Module_4_EX2_Seq.ACD file, go online and put the CompactLogix into RUN mode.

Part 1



1. What Data Type is the Seq_Control tag? _____
List the tag name and Data Types that are included in the Seq_Control tag

Name	Data Type

2. How many tags comprise the array Seq_data? _____

What are the index number values? _____

What is the data type for the Seq_data array? _____


3. What value is the Seq_Mask tag? _____

What is the binary style for the Seq_Mask tag? _____

Hint: Monitor the Seq_Mask tag

Left click the style cell for the Seq_Mask tag

Click the drop-down arrow and choose Binary

Scope:		 c_l_seq	Show...	Show All	
	Name	Value	Force Mask	Style	Data Type
	+ Local:1:I	{...}	{...}		AB:1769_DI16:I:0
	+ Local:2:C	{...}	{...}		AB:1769_D016:C:0
	+ Local:2:I	{...}	{...}		AB:1769_D016:I:0
	+ Local:2:O	{...}	{...}		AB:1769_D016:...
	- Seq_Control	{...}	{...}		CONTROL
	+ Seq_Control.LEN	4		Decimal	DINT
	+ Seq_Control.POS	0		Decimal	DINT
	- Seq_Control.EN	0		Decimal	BOOL
	- Seq_Control.EU	0		Decimal	BOOL
	- Seq_Control.DN	0		Decimal	BOOL
	- Seq_Control.EM	0		Decimal	BOOL
	- Seq_Control.ER	0		Decimal	BOOL
	- Seq_Control.UL	0		Decimal	BOOL
	- Seq_Control.IN	0		Decimal	BOOL
	- Seq_Control.FD	0		Decimal	BOOL
	+ Seq_data	{...}	{...}	Decimal	DINT[5]
	+ seq_dest	0		Decimal	DINT
▶	+ Seq_Mask	255		Decimal	DINT

Binary

Octal

Decimal

Hex

ASCII

4. Press PB1 on the demo unit

Which outputs turn on? Explain.

Hint: Compare position value Seq_data array index number

Change the values in the Seq_data array to binary style

5. Keep pressing PB1 on the demo unit and view array data and position values to determine Seq_data tag values. How many positions are programed in the sequencer? _____
6. Once the sequence is done, what is the next position value when PB1 is pressed? _____
7. What causes the demo unit pilot lights to turn on and off? Explain.

The outcomes of this exercise (listed on page 1) specifies the skills that the Student must demonstrate to the Instructor. Once the Instructor is satisfied with the demonstration of Knowledge & Skills by the individual student, they will sign this document (for the student), then enter a 100% into the Hands-On Lab grade in Sakai.

I verify that this student has completed all of the requirements of this Hands-On Assessment:

Student Name: _____

Faculty Signature: _____ Date: _____

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