

## PLC210 Lab 7: Sequencer Output Instruction

Download the project Compact\_Module\_4\_Ex2\_Seq.ACD, go Online and put the CompactLogix into the Run mode to do the following lab.

The I/O tag names in this lab may need to be changed to match the addresses on your hardware trainer.

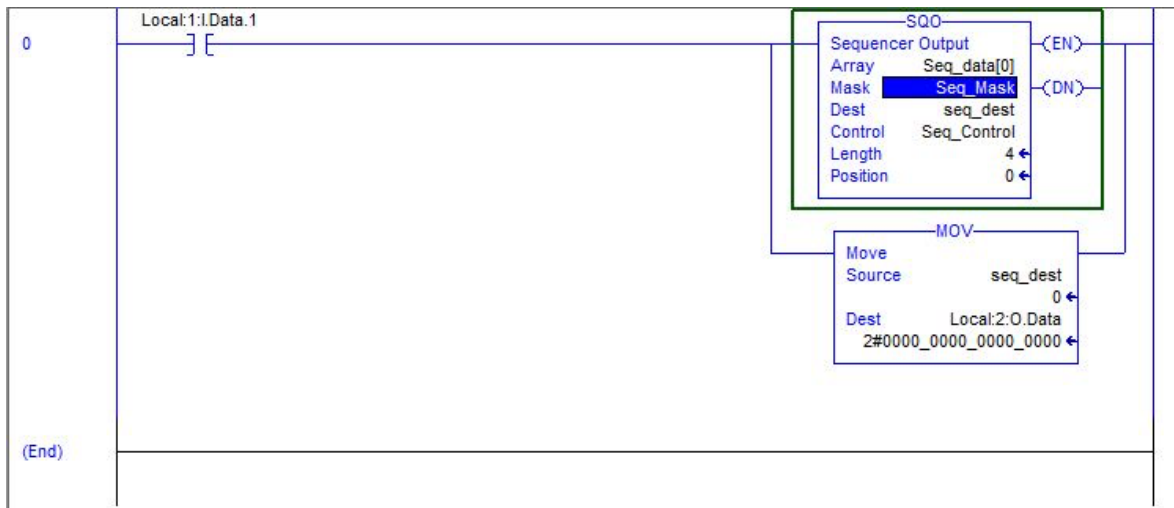


Figure 1-A. Sequencer Output Instruction.

1. What Data Type is the Seq\_Control tag? \_\_\_\_\_  
List the tag Name and Data Types that are included in the Seq\_Control tag

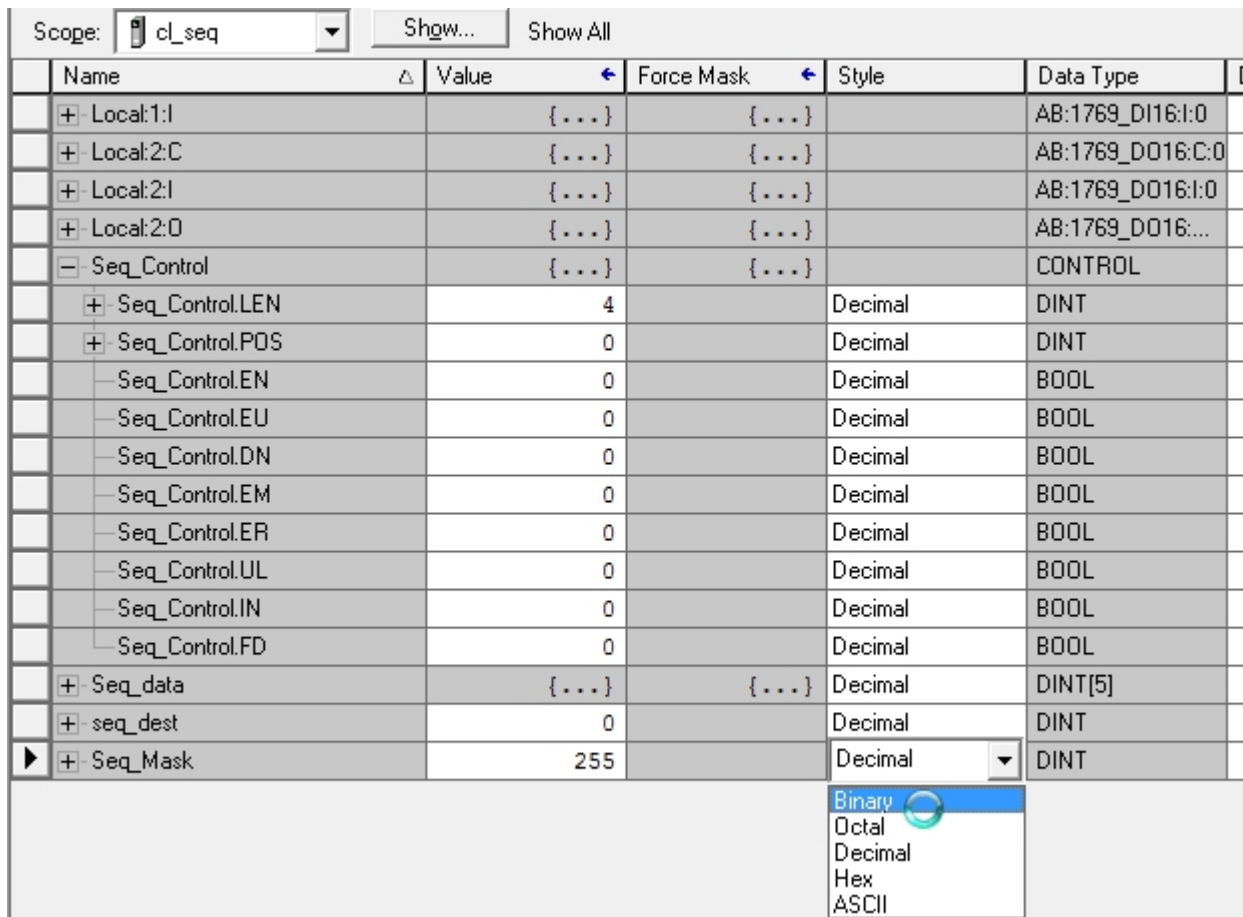
Name	Data Type

Table 1-A

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



Name	Value	Force Mask	Style	Data Type
+ Local:1:I	{...}	{...}		AB:1769_DI16:I:0
+ Local:2:C	{...}	{...}		AB:1769_DO16:C:0
+ Local:2:I	{...}	{...}		AB:1769_DO16:I:0
+ Local:2:O	{...}	{...}		AB:1769_DO16:...
- 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

Figure 2-A. Changing the data style.

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

4. Keep pressing PB1 on demo unit and view array data and position value to determine seq\_data tag value.

How many positions are programmed in the sequencer? \_\_\_\_\_

5. Once the sequence is done, what is the next position value when PB1 is pressed? \_\_\_\_\_

6. What causes the demo pilot lights to turn On and Off?

Explain:

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