

# PLC129 LAB 3.1: MOVE AND FILE INSTRUCTIONS

Student Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

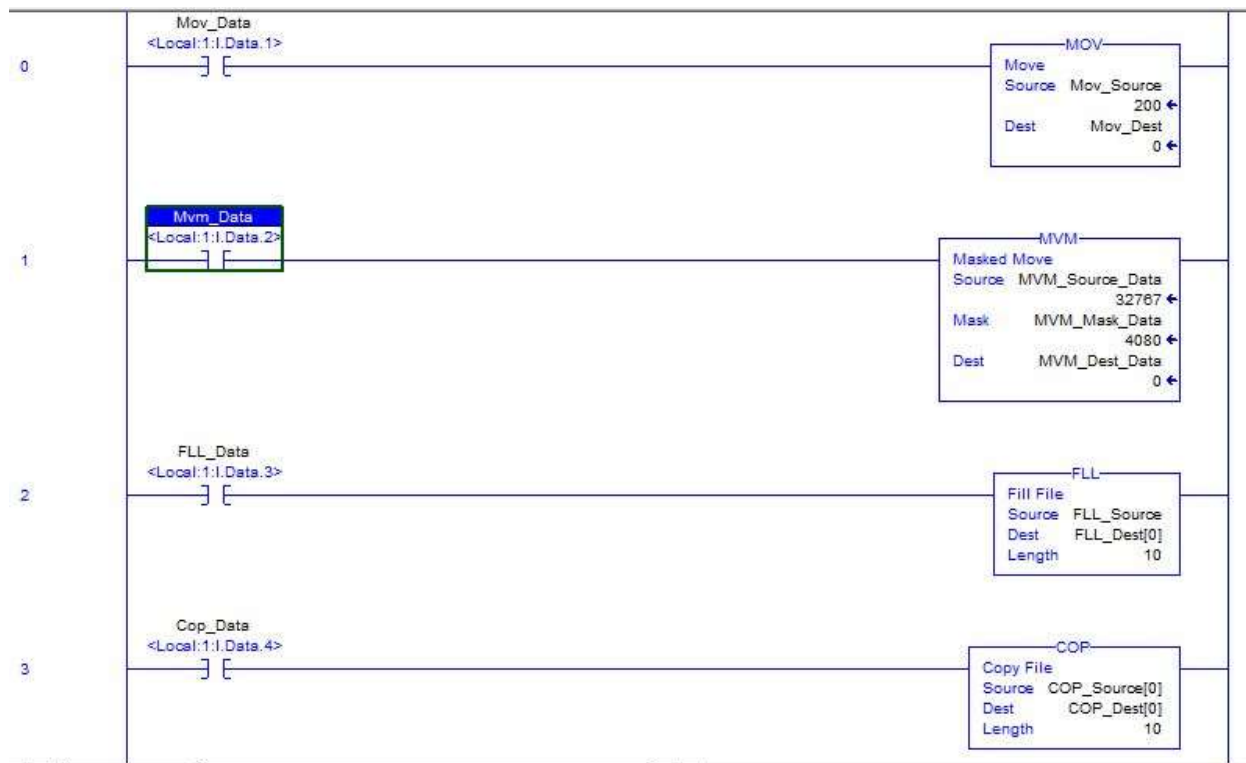
## LAB OUTCOMES:

1. Explain the function and operation of the MOV and MVM instructions
2. Explain the function and operation of the FLL and COP instructions
3. Demonstrate how to navigate to a tag to change the value
4. Demonstrate how to change the data style setting in a tag

## LAB PROCESS:

Download the project “Compact\_Module\_3\_EX1.ACD”, go online and put the CompactLogix into RUN mode.

### Part 1



# 1. MOV instruction – Move

Verify that there is a value in tag MOV\_Source. If there is not, put a value into this tag

Now go to tag MOV\_Dest and monitor the data

Press PB1 – MOV\_Data tag – the “MOV\_DATA” input

Does the data in the tag MOV\_Source transfer to tag MOV\_Dest?

Release the PB1 pushbutton

What value is in the Source tag?

What value is in the Dest tag?

What type of tag is MOV\_Data?

Hint: Monitor tag’s Properties

What is the base tag for MOV\_Data?

## 2. MVM instruction – Masked Move

Monitor the value in tag MVM\_Source. Verify that the value of 32767 is in the tag. If it is not, enter it in.

Press PB2 – MVM\_Data tag – the “MVM\_DATA” input

Monitor the value in tag MVM\_Dest.

What value is displayed?

What is the default style for the MVM instruction’s tags?

Change the Source, Mask, and Destination tags to style “Binary”

Did all 16 bits transfer from tag MVM\_Source to MVM\_Dest? Explain.

## 3. FLL instruction – File Fill

Go to tag FLL\_Source in controller tags. Verify that there is data in the tag. If there is not, put a value in such as 1234.

Monitor tag FLL\_Dest[0], and the next 9 memory locations of the array as well

Press PB3 – FLL\_Data tag – the “FLL\_DATA” input

Does the data transfer?

What value will transfer into each location in the array?

The index values of the array range from \_\_\_\_\_ to \_\_\_\_\_

How many array locations received the data?

Go to tag FLL\_Source tag in controller tags

Enter a value of “0”

Press PB3 -FLL\_Data tag – the “FLL\_DATA” input

What value will transfer into each location in the array?

## 4. COP instruction – Copy File

In controller tags – monitor the 10 tag memory array locations starting at tag name

COP\_Source[0]

Verify that there is unique data in each tag

Enter data for tags if not already there

In controller tags – monitor the 10 tag memory array locations starting at tag name  
COP\_Dest[0]

Toggle SW4 input – COP\_Data tag – the “COP\_DATA” input  
Does the data transfer?

What type of tag is COP\_Data?  
Hint: Monitor tag’s properties

What is the base tag for COP\_Data?

The index value of the array ranges from \_\_\_\_\_ to \_\_\_\_\_  
How many array locations received the data?

*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: \_\_\_\_\_

#### **DOL DISCLAIMER:**

This product was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).