

# PLC131 LAB 1.2: SEARCHING IN RSLOGIX5000

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## LAB OUTCOMES:

1. Demonstrate how search a project online or offline
2. Demonstrate how to perform a Search and Replace
3. Demonstrate how to search for a specific Tag
4. Demonstrate how to search for Tags using Cross Reference

## LAB PROCESS:

Download the project “Compact\_Module\_7\_search\_doc.ACD” file, go online and put the CompactLogix into RUN mode.

### Part 1

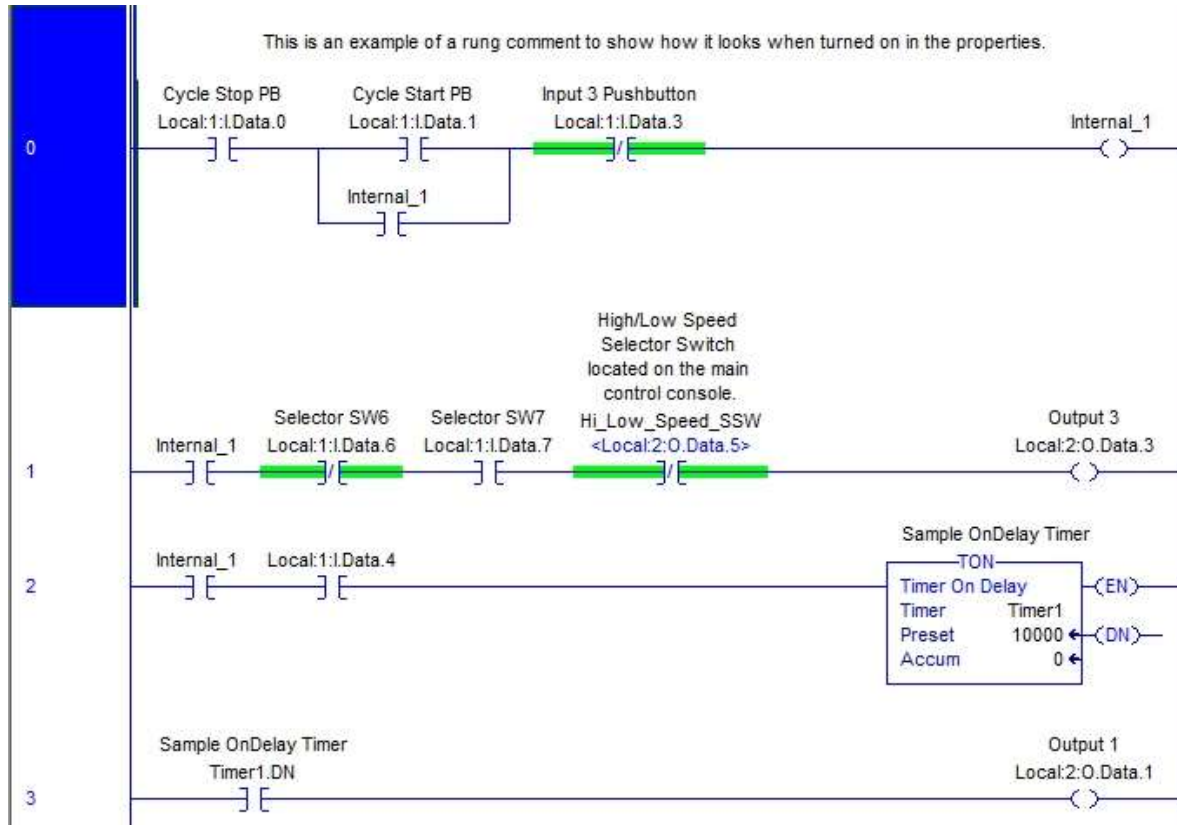


Figure 1-A

Note: For CompactLogix processors – Searching can be accomplished either online or offline.

Search and Replace can only be performed offline

Open the MainRoutine

1. Search for Tags using Search -> Find

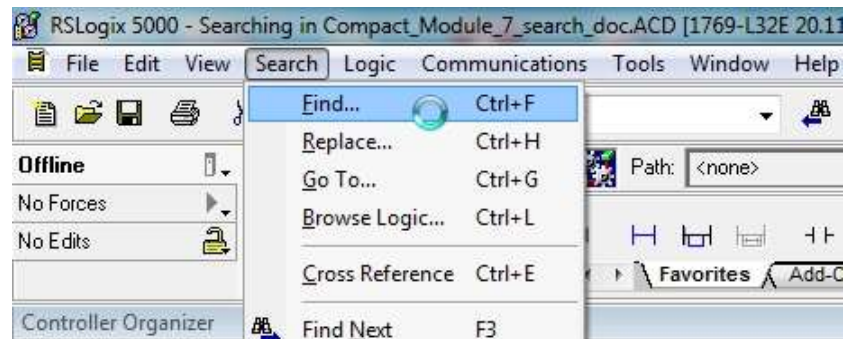


Figure 2-A

On the Menu Bar of the RSLogix 5000 application, select Search -> Find

The Find in Routines window opens

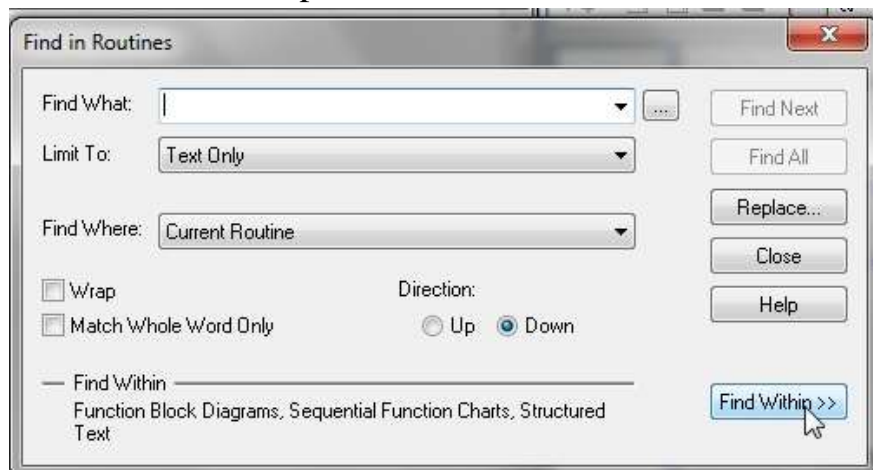


Figure 3-A

Click the Find Within>> button to configure Search criteria.

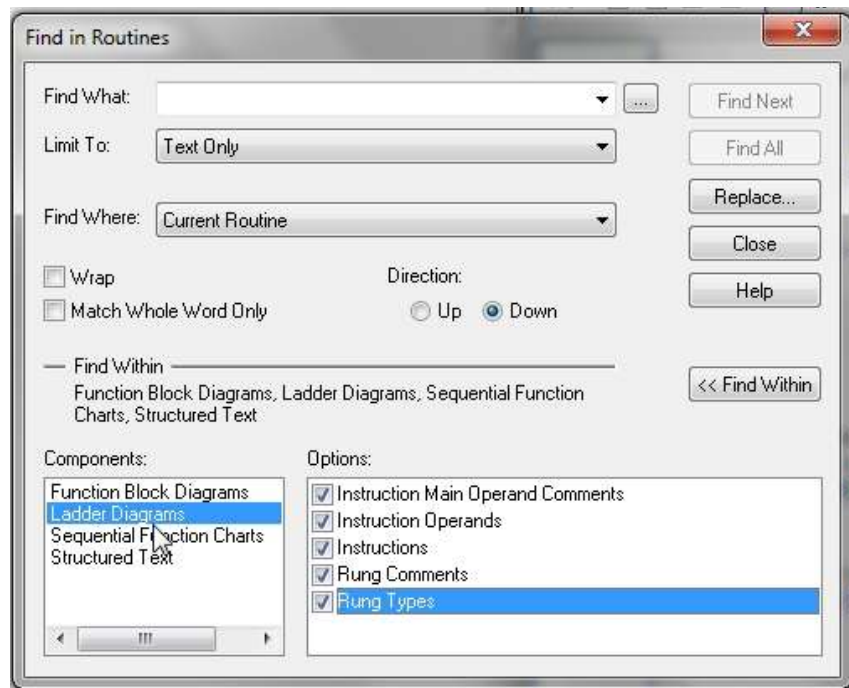


Figure 4-A

In the Components box – select Ladder Diagrams

In the Options box ensure all the boxes are checked.

Note: Options filters specific searches

Click the << Find Within button to close Components and Option boxes

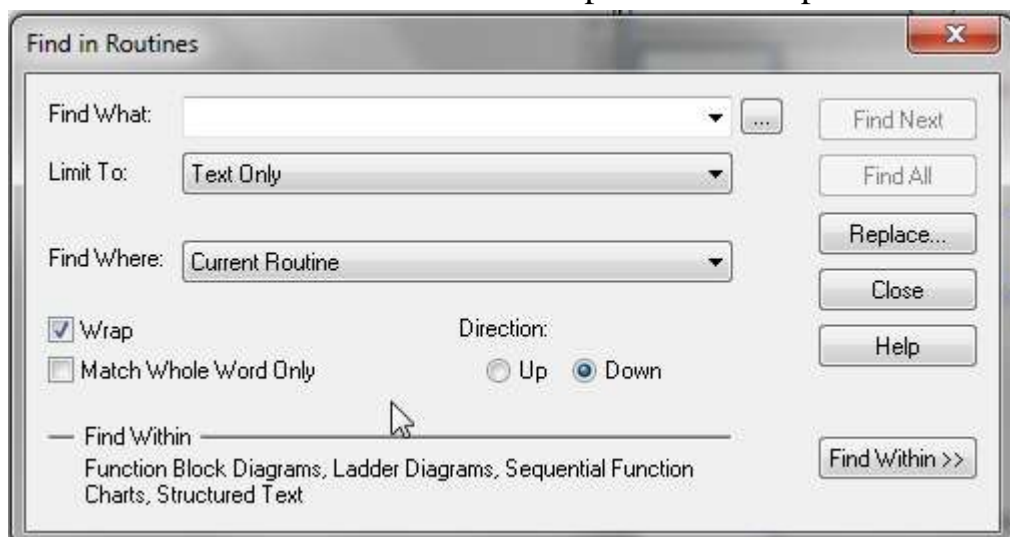


Figure 5-A

Ensure Wrap box is checked

Direction: Down

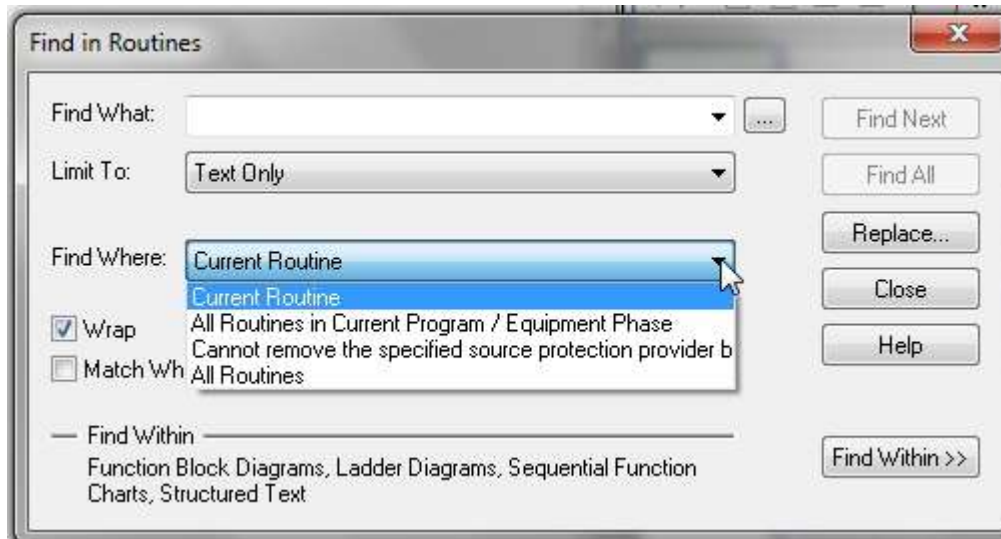


Figure 6-A

In the Find Where selection box choose Current Routine

Note: Current Routine is the routine shown in the right-side window of the RSLogix 5000 software.

Click the button to the right of the Find What: selection box

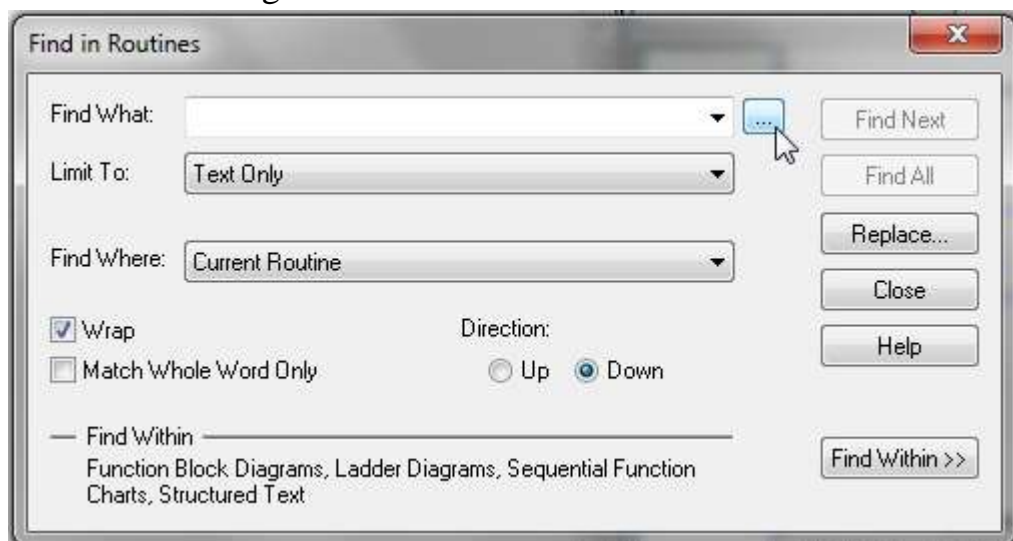


Figure 7-A

The Search Item Browser window opens

This window shows project Tags.

Select the Alarm Timer tag.

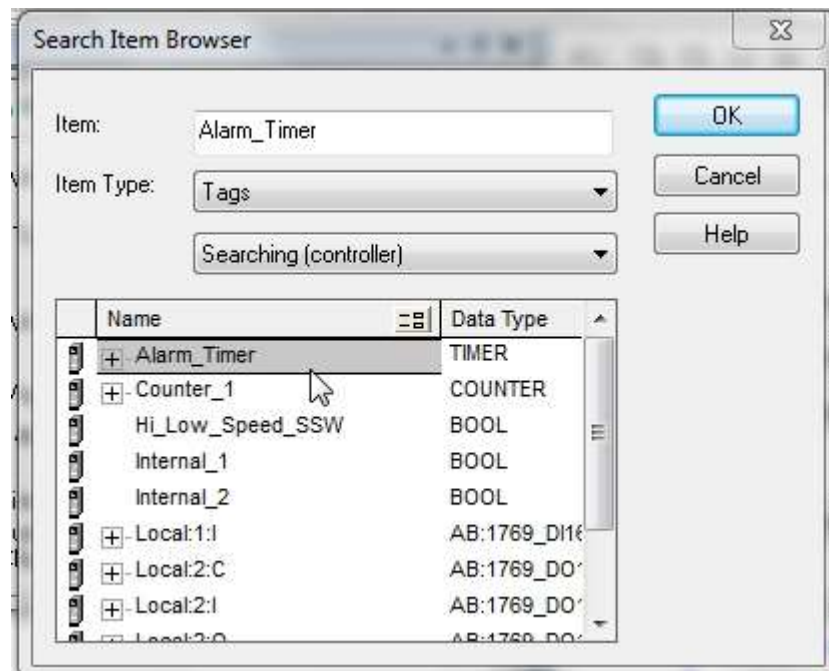


Figure 8-A

Click the OK button

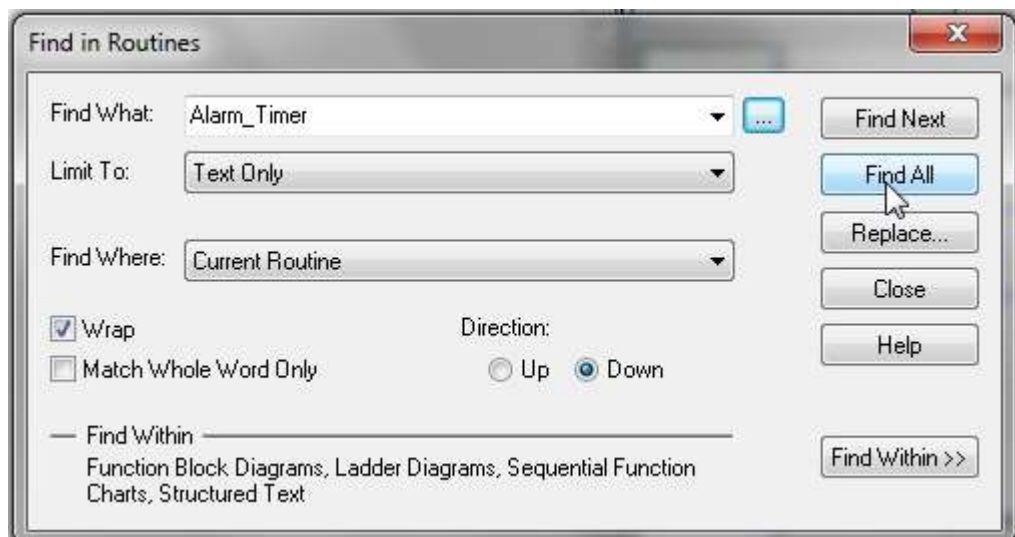


Figure 9-A

The tag selected in the Search Item Browser windows appears in the

Find What: selection box

Note: A tag name could be directly type in the Find What: selection box.

Click the Find All button

A Search Results window opens at the bottom of the Ladder screen.

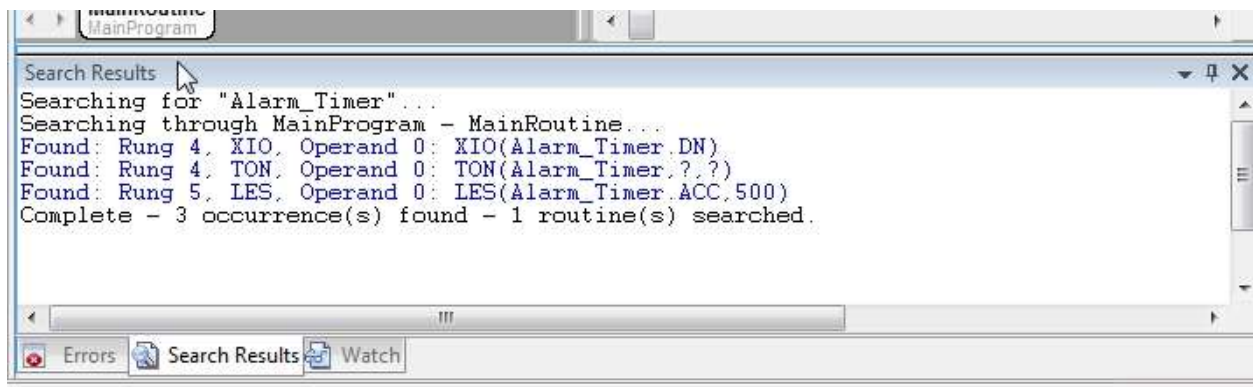


Figure 10-A

The lines in blue are the occurrences of the selected tag.

Ensure MainRoutine window is opened.

Return to the Search -> Find on Menu Bar to open the Find in Routines window

Search for the tag Timer1

List the occurrences of the Timer1 tag

Open the Speed Control routine

Return to the Search -> Find on Menu Bar to open the Find in Routines window

Search for the tag Timer1

List the occurrences of the Timer1 tag and explain:

## 2. Search for Tags using Quick Search / Generic Search Box

The Quick Search / Generic Search Box is located in the Standard Toolbar.

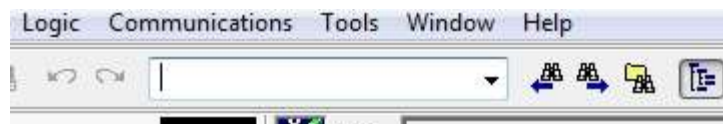
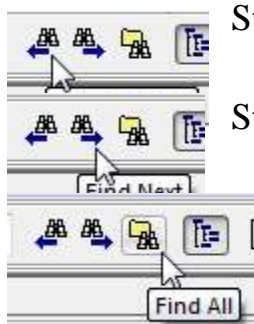


Figure 11-A

Three icons associated with the Quick Search / Generic Search Box are:



Steps up the Ladder routine to find an occurrence

Steps down the Ladder routine to find an occurrence

Finds all the occurrences – opens Search Result window

Figure 12-A

Open MainRoutine

Type in the tag name of Internal\_1 in the Quick Search box.

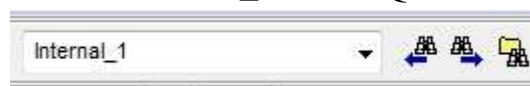


Figure 13-A



Click the Find All icon

The Find in Routines window opens with the tag Internal\_1 listed in the Find What: selection box

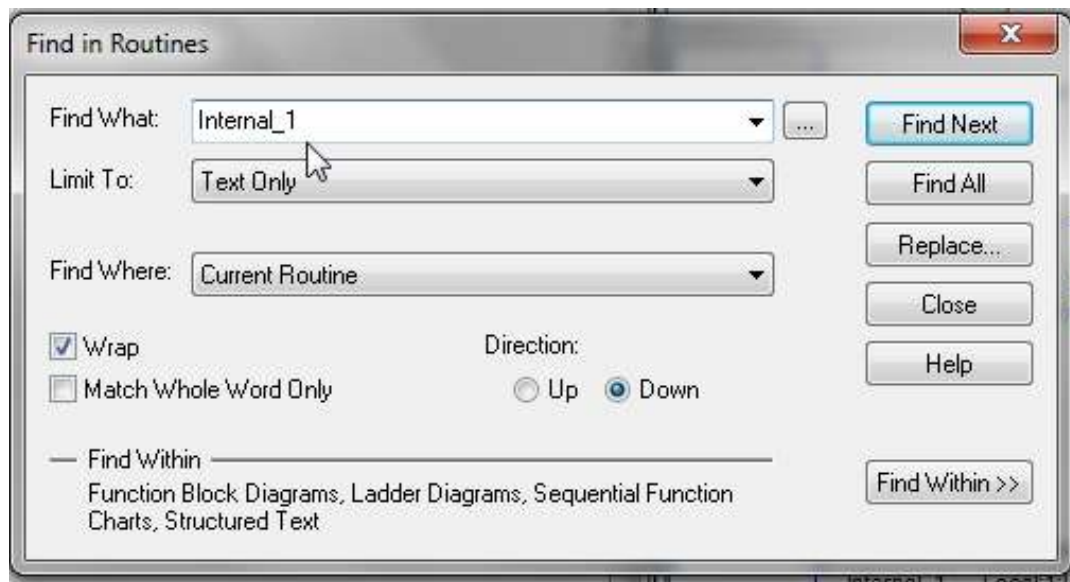


Figure 14-A

Click the Find All button.

List the occurrences of the Timer1 tag

### 3. Search for Tags using Cross Reference

Open MainRoutine

Right mouse click on the timer tag Timer1 on Rung 2.

From the selection menu – choose

Go To Cross Reference For “Timer1”

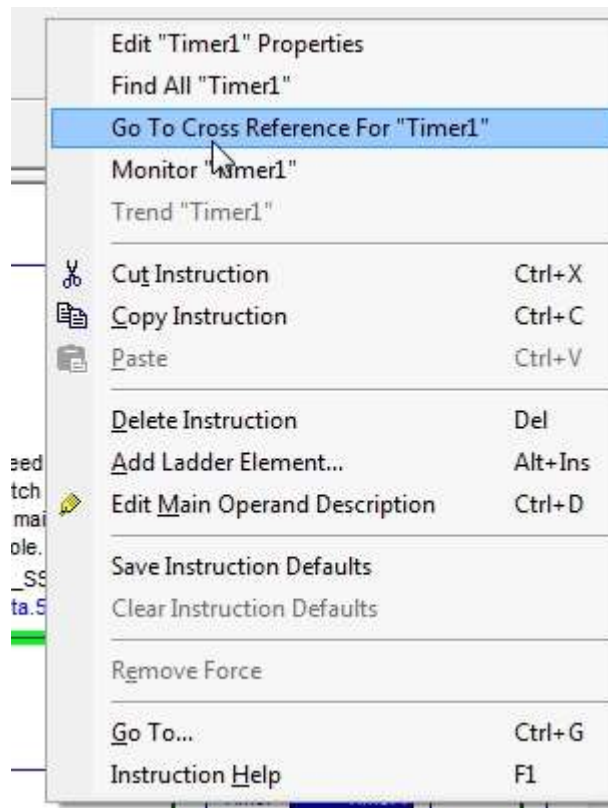


Figure 15-A

Click Cross Reference For “Timer1”

Type:	Tag	Scope:	Searching	Show:	Show All	
Name:	Timer1			Refresh		
Element	Container	Routine	Location	Reference	BaseTag	Destructi
TON	MainProgram	MainRoutine	Rung 2	Timer1		Y
XIC	MainProgram	MainRoutine	Rung 3	Timer1.DN		N

Figure 16-A

The Cross reference window lists the occurrences of the selected tag - Timer1

Open the MainRoutine

At Rung 4 – Cross Reference the tag Local:1:I.Data.5

List Element - Routine - Location information for Local:1:I.Data.5

#### 4. Search for Tags using Find All

Note: Find All is similar to using Cross Reference

Open MainRoutine

Right mouse click on the timer tag Timer1 on Rung 2.

From the selection menu – choose

Find All “Timer1”

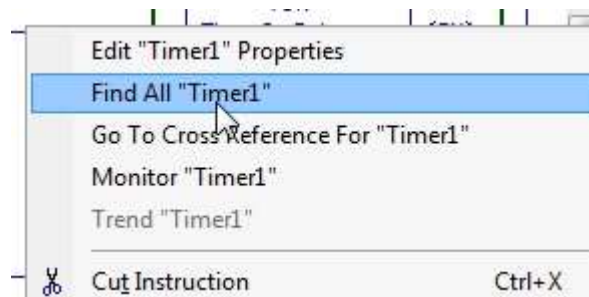


Figure 17-A

Click Find All “Timer1”

A Search Result window opens at the bottom of the Ladder window that shows the occurrences of Timer1

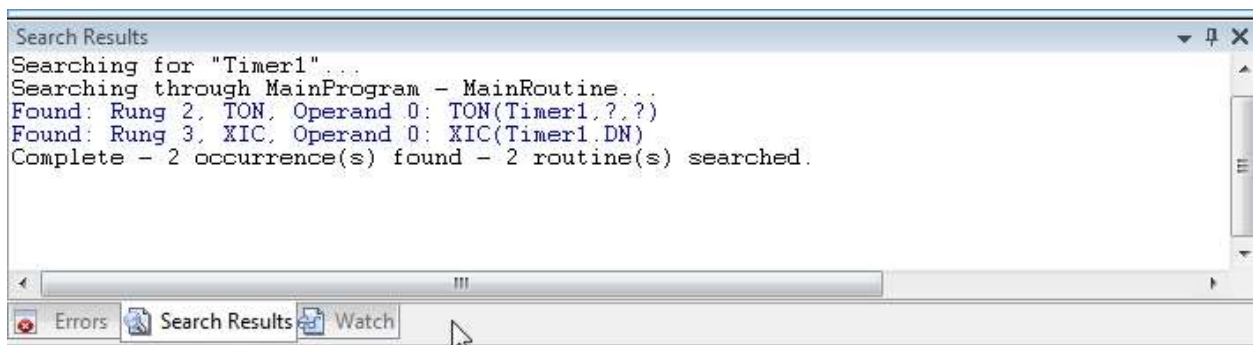


Figure 18-A

Open the MainRoutine

At Rung 0 – use Find All for tag Local:1:I.Data.3

List Instruction type – Routine location - Rung number information for the occurrences of Local:1:I.Data.5

Open the Find in Routines window using Search -> Find

Ensure MainRoutine is opened in Ladder window

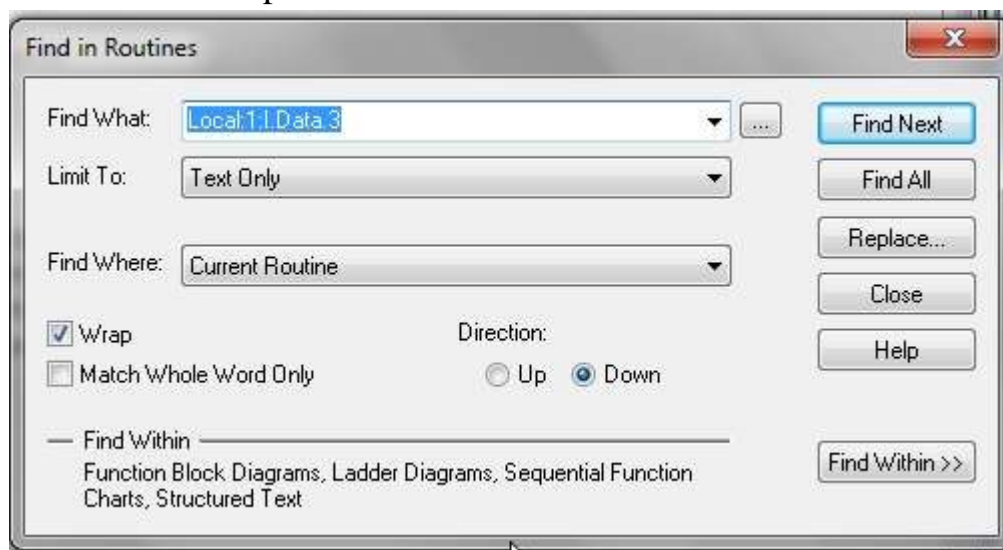


Figure 19-A

Configure the Find in Routines window as shown

Click the Find All button

List Instruction type – Routine location - Rung number information for the occurrences of Local:1:I.Data.5

Are the results the same as with using Find All method?

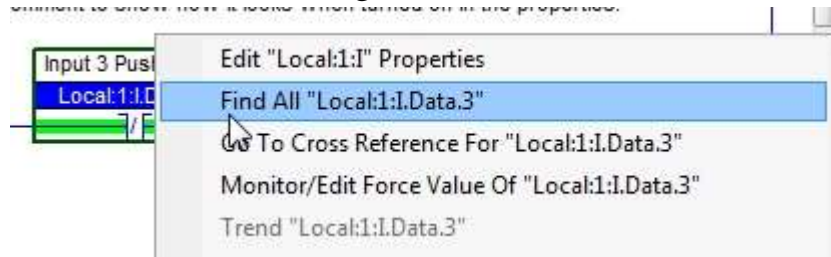


Figure 20-A

Explain:

## 5. Search for documentation using Search -> Find

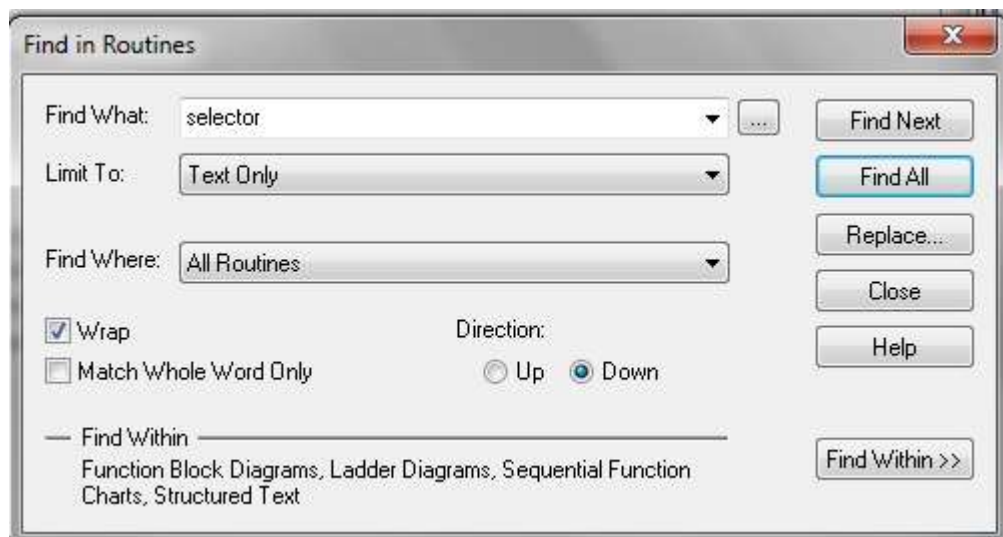


Figure 21-A

Configure the Find in Routine window as shown.

Click the Find All button.

List Instruction type – Routine location - Rung number – full comment information for the occurrences of - selector

6. Search for documentation using Quick Search / Generic Search Box



Figure 22-A

Type the word –cycle- into to the Quick Search / Generic Search Box

Click the Find All icon

List Instruction type – Routine location - Rung number – full comment information for the occurrences of - cycle

7. Search for type of instructions using Search -> Find

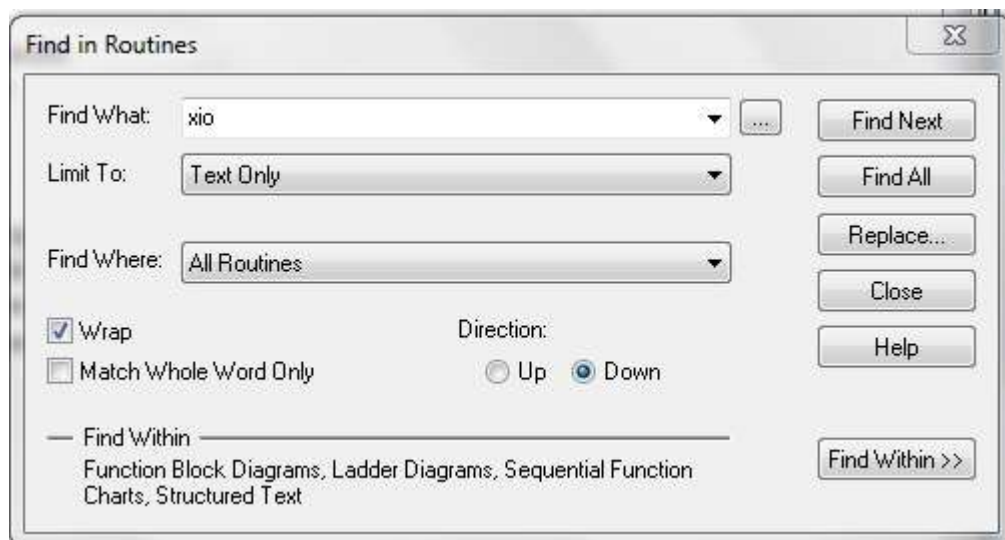


Figure 23-A

Configure the Find in Routine window as shown.

Click the Find All button.

List Instruction type – Routine location - Rung number – tag information for the occurrences of - xio

Note: The Quick Search / Generic Search Box can also be used to search for instruction types

#### 8. Search for type of instructions and tags using Search -> Find

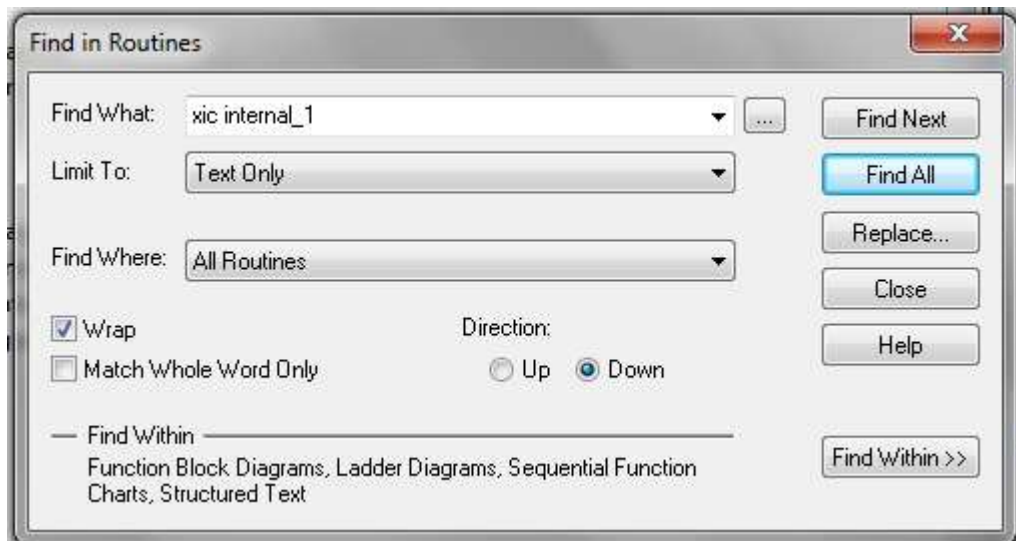


Figure 24-A

Configure the Find in Routine window as shown.

Click the Find All button.

List Instruction type – Routine location - Rung number – tag information for the occurrences of – xic internal\_1

Does the output instruction at Rung 0 of the MainRoutine show-up in the Search Results window? Explain.

Note: The Quick Search / Generic Search Box can also be used to search for instruction types and tags.

## 9. Search and Replace

Note: Must be Offline for Search and Replace

Navigate to the Find in Routines window and search for the tag  
Internal\_1

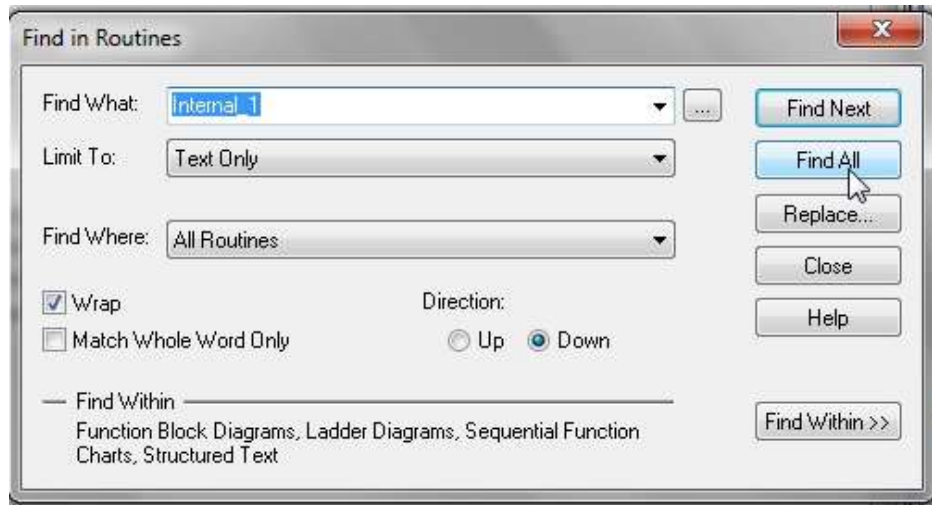


Figure 25-A

Configure the Find in Routine window as shown.

Click the Find All button.

List Instruction type – Routine location - Rung number – for the Internal\_1  
tag

Navigate to the Replace in Routines window

On the Menu Bar click Search -> Replace



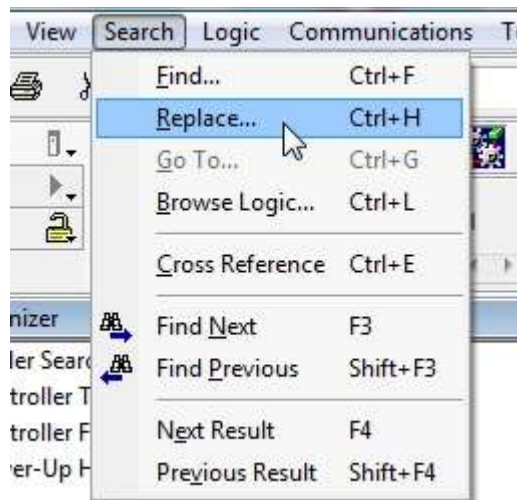


Figure 26-A

The Replace in Routine window opens.

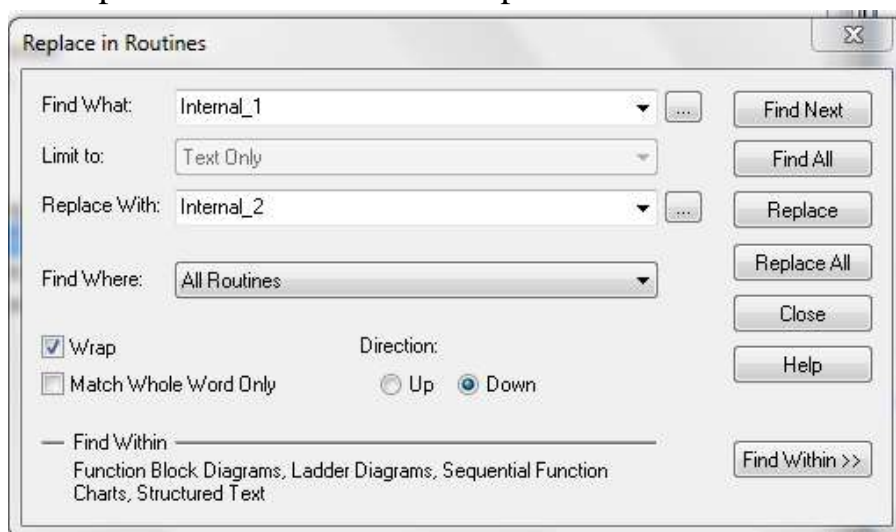


Figure 27-A

Configure the Replace in Routine window as shown.

Click the Replace All button.

View the information in the Search Results window.

Do a Find All for the Internal\_2 tag

List Instruction type – Routine location - Rung number – for the Internal\_2 tag

Compare the information between Internal\_1 search and the Internal\_2 search  
Explain:

Do a search for the Internal\_1 tag.  
What are results of the search?

*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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