

# Section 8 Variable Tables

---

---

## INDEX

---

<b>8. OBJECTIVES</b> .....	<b>3</b>
8.1 VARIABLE TABLES FOR MONITORING VALUES.....	5
8.2 CREATING A VARIABLE DISPLAY. ....	5
8.3 ADDING COMMENTS TO A VARIABLE TABLE.....	7

# Section 8 Variable Tables

---

## Student Notes

---

---

## Section 8 Variable Tables

---

### 8. Objectives

The objectives of this section are to introduce students to the following:

- How to create a variable table.
- Adding comments to a variable table.

# Section 8 Variable Tables

---

Student Notes

---

---

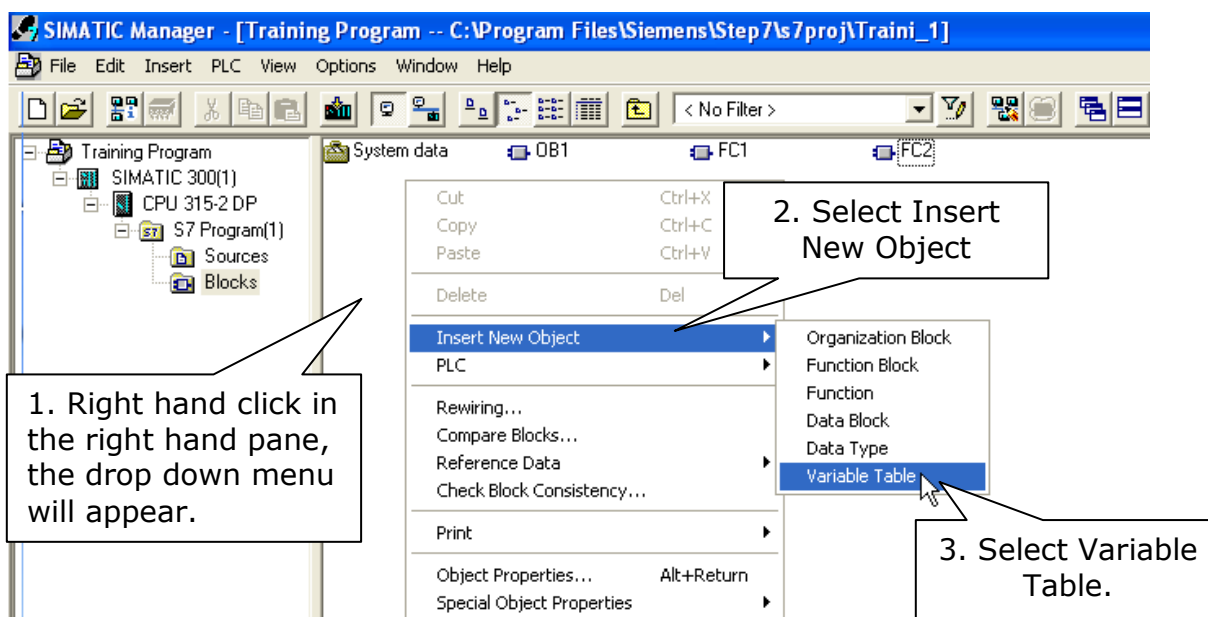
## Section 8 Variable Tables

### 8.1 Variable Tables for Monitoring Values.

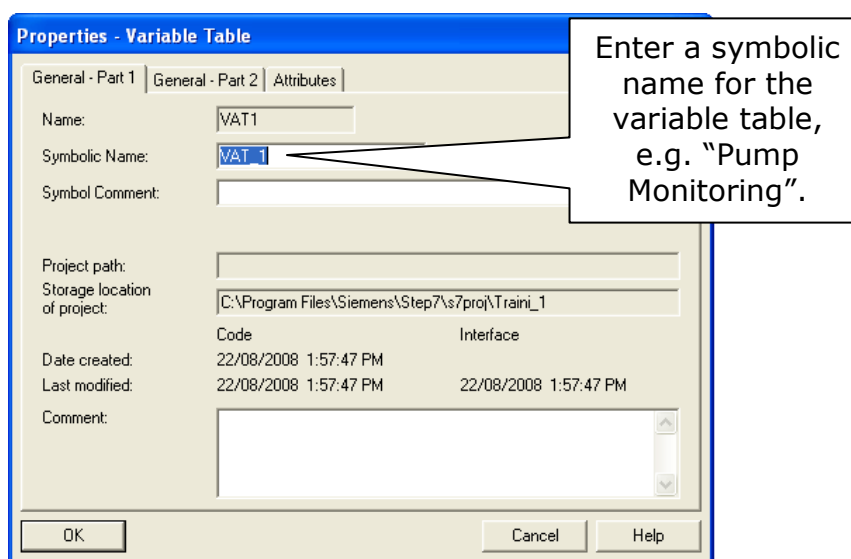
Variable tables allow you to display the current values in the PLC on a programming device. Variables can be modified and fixed values can be assigned to addresses when testing a program, but these maybe over written by the running program. We can also enable peripheral output values that allow you to assign fixed values to individual I/O outputs of a user program or a CPU in stop mode.

### 8.2 Creating a Variable Display.

To create a variable table right mouse click in the right hand pane.

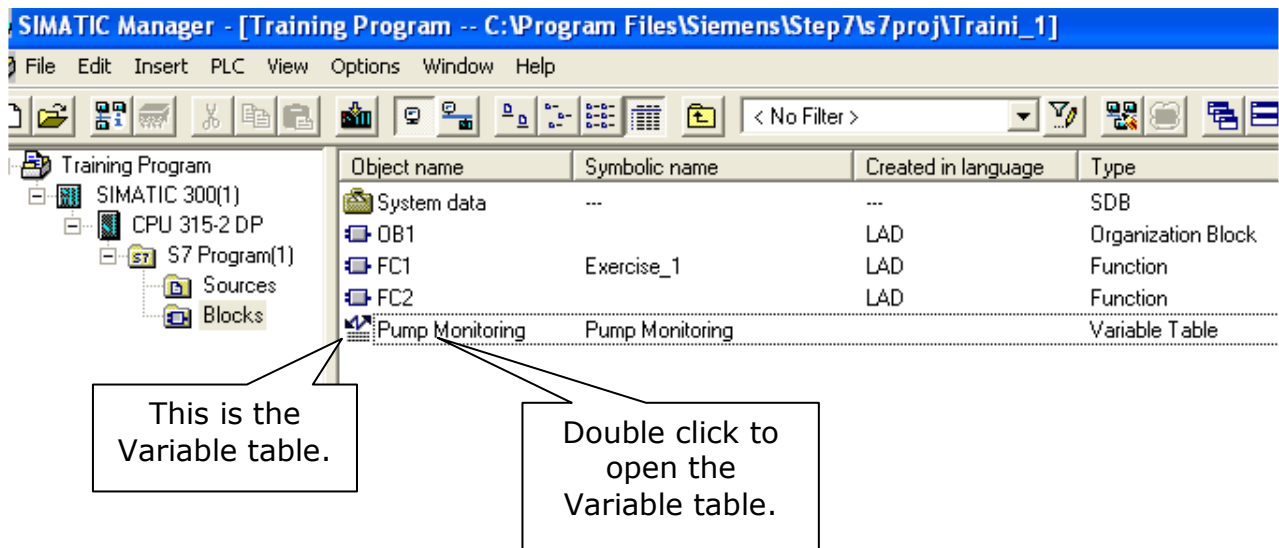


The following window will appear.

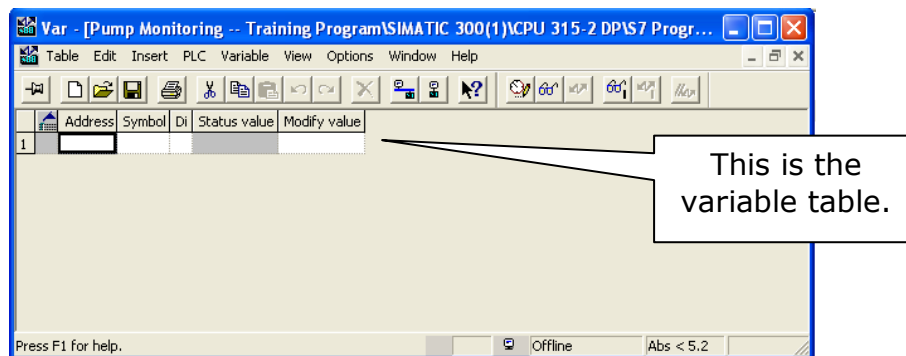


## Section 8 Variable Tables

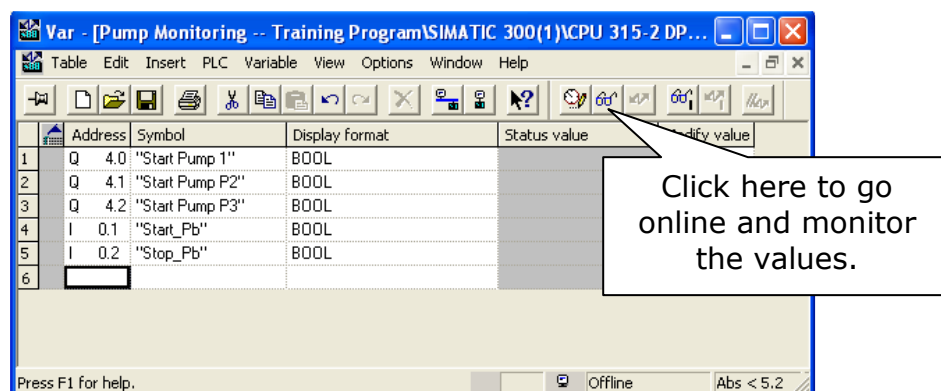
The Variable table will appear below as shown below.



The Variable table is shown below.

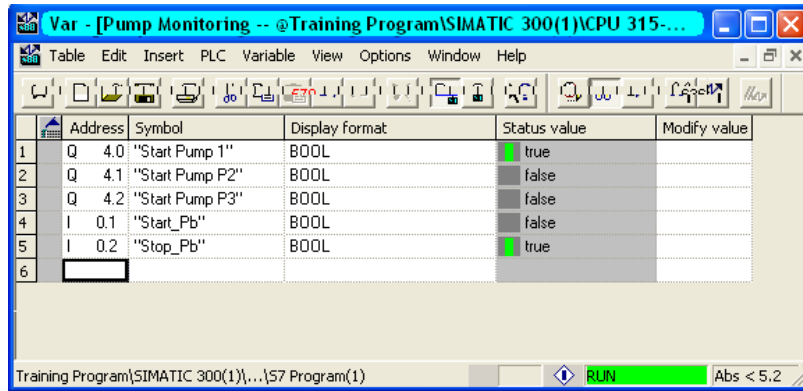


Enter the addresses to be monitored as shown below.



## Section 8 Variable Tables

The window below shows an online variable table.

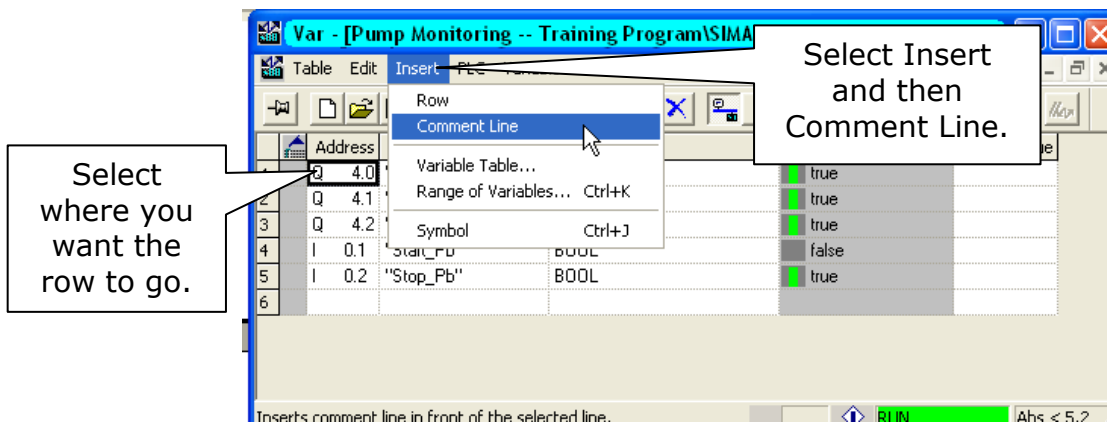


The screenshot shows the 'Var' window in SIMATIC Manager. The table contains the following data:

	Address	Symbol	Display format	Status value	Modify value
1	Q 4.0	"Start Pump 1"	BOOL	true	
2	Q 4.1	"Start Pump P2"	BOOL	false	
3	Q 4.2	"Start Pump P3"	BOOL	false	
4	I 0.1	"Start_Pb"	BOOL	false	
5	I 0.2	"Stop_Pb"	BOOL	true	
6					

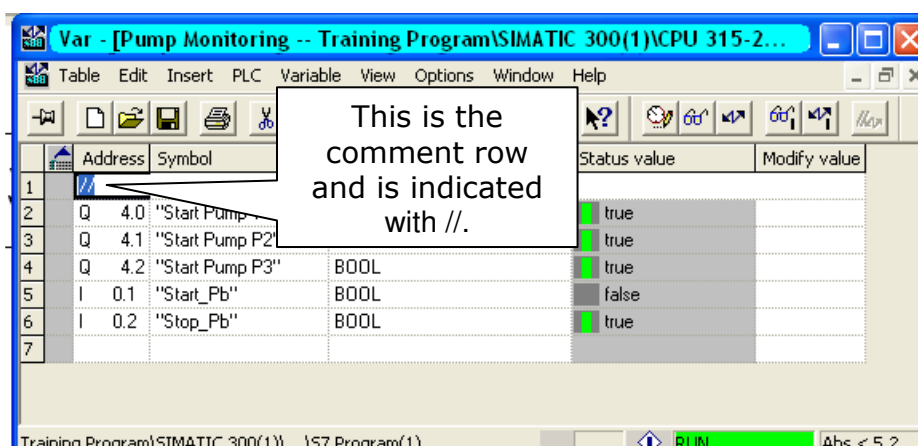
### 8.3 Adding comments to a Variable Table.

To add comments to the table, follow the procedure below.



The screenshot shows the 'Var' window with the 'Insert' menu open. The 'Comment Line' option is highlighted. A callout box points to the 'Comment Line' option with the text: "Select Insert and then Comment Line." Another callout box points to the first row of the table with the text: "Select where you want the row to go." The status bar at the bottom indicates "Inserts comment line in front of the selected line."

The window will change as below.



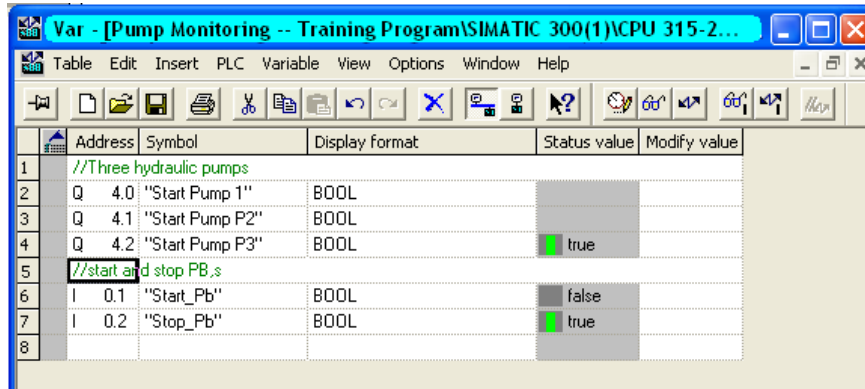
The screenshot shows the 'Var' window after adding a comment line. The table now includes a comment row at the top, indicated by a callout box: "This is the comment row and is indicated with //."

	Address	Symbol	Display format	Status value	Modify value
1					
2	Q 4.0	"Start Pump 1"	BOOL	true	
3	Q 4.1	"Start Pump P2"	BOOL	true	
4	Q 4.2	"Start Pump P3"	BOOL	true	
5	I 0.1	"Start_Pb"	BOOL	false	
6	I 0.2	"Stop_Pb"	BOOL	true	
7					

## Section 8 Variable Tables

---

Type the comment as shown below.



The screenshot shows the SIMATIC Manager Variable Table window. The table has five columns: Address, Symbol, Display format, Status value, and Modify value. The data is as follows:

	Address	Symbol	Display format	Status value	Modify value
1	//Three hydraulic pumps				
2	Q 4.0	"Start Pump 1"	BOOL		
3	Q 4.1	"Start Pump P2"	BOOL		
4	Q 4.2	"Start Pump P3"	BOOL	true	
5	//start and stop PB,s				
6	I 0.1	"Start_Pb"	BOOL	false	
7	I 0.2	"Stop_Pb"	BOOL	true	
8					

Comments can also be added by simply typing // in the address and continuing the comment after the //’s.