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## 6. Handling Projects (CPU Programs, USER Software).

### 6.1.1 Starting RS Logix 500 and opening a "Project"

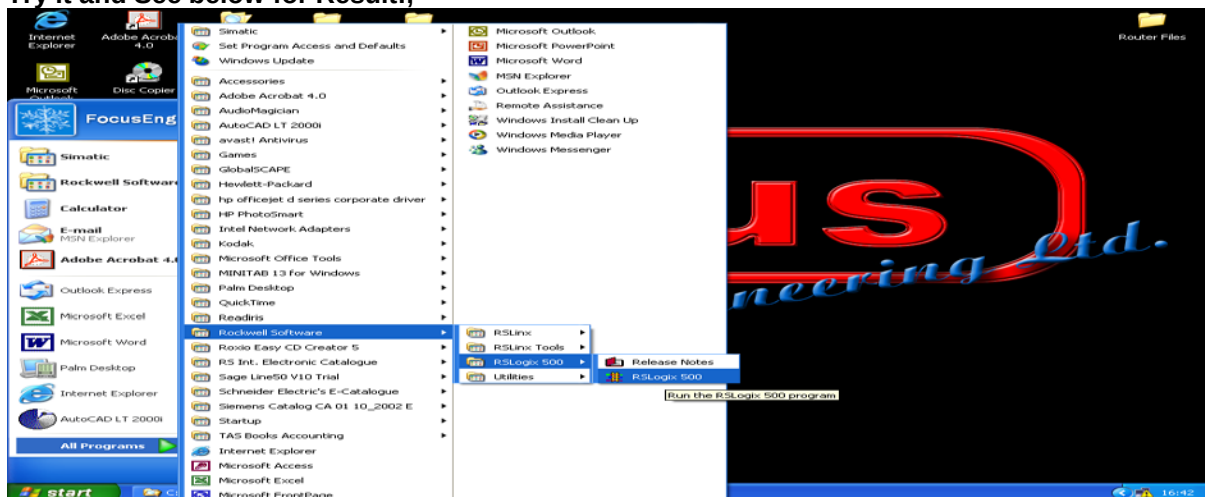
There are 3 steps involved to opening a "LAD File" when using Allen Bradley,

- From the Menu **Start > All Programs > Rockwell Software > RSLogix > RSLogix500**
- Open the Project.
- Highlight and double click the selected LAD File to open the "Editor".

#### 6.1.1.1 Exercise Start RSLogix500 using the "Start" menu.

From the ICON " Start" Start Menu Command **Start > All Programs > Rockwell Software > RSLogix > RSLogix500** RSLogix Editor can be started. Use the cursor keys, mouse or TAB key to start the editor.

Try it and See below for Result:,

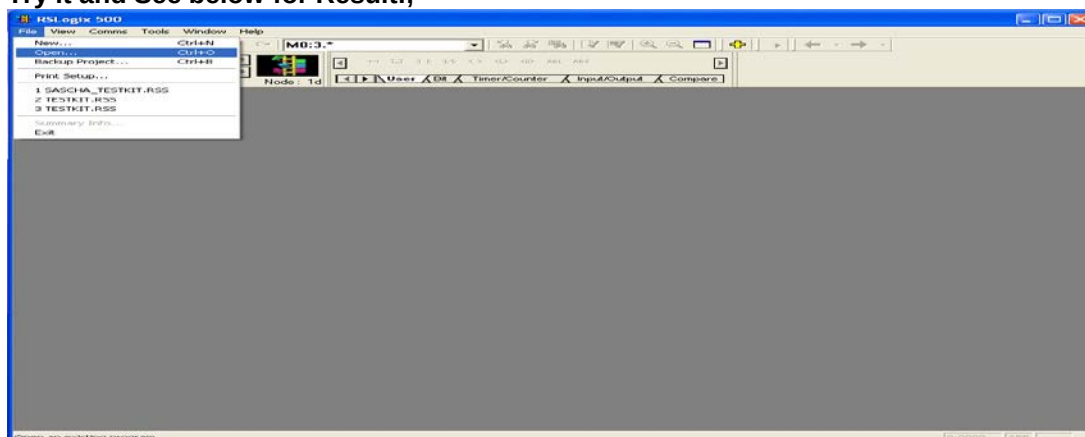


START RSLOGIX500 (STEP 1)

#### 6.1.1.2 Exercise Open a project.

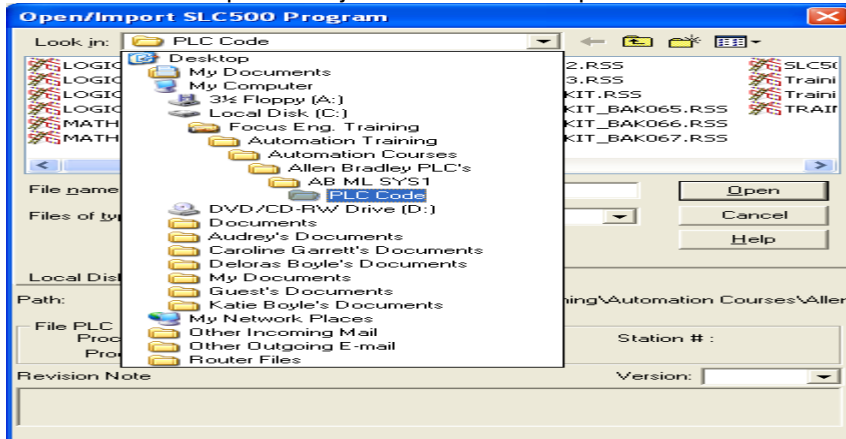
From RSLogix500 select the **File>Open** command to open a project window as follows. Use the cursor keys, mouse or TAB key to select project you wish to edit.

Try it and See below for Result:,



OPEN A PROJECT (STEP 2)

"Browse" to the required Project File and Click Open.

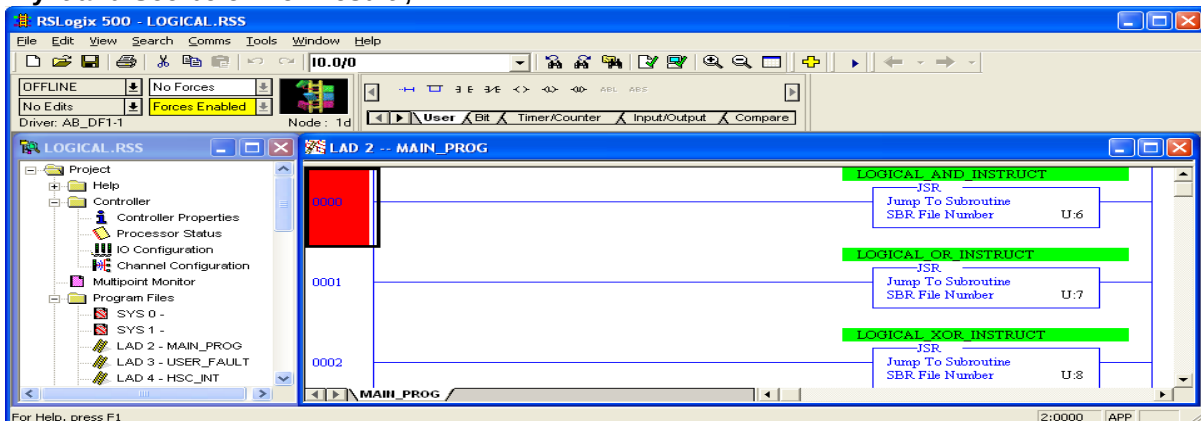


OPEN A PROJECT CONT (STEP 2 CONT,)

### 6.1.1.3 Exercise Open "LAD File" using RS Logix 500

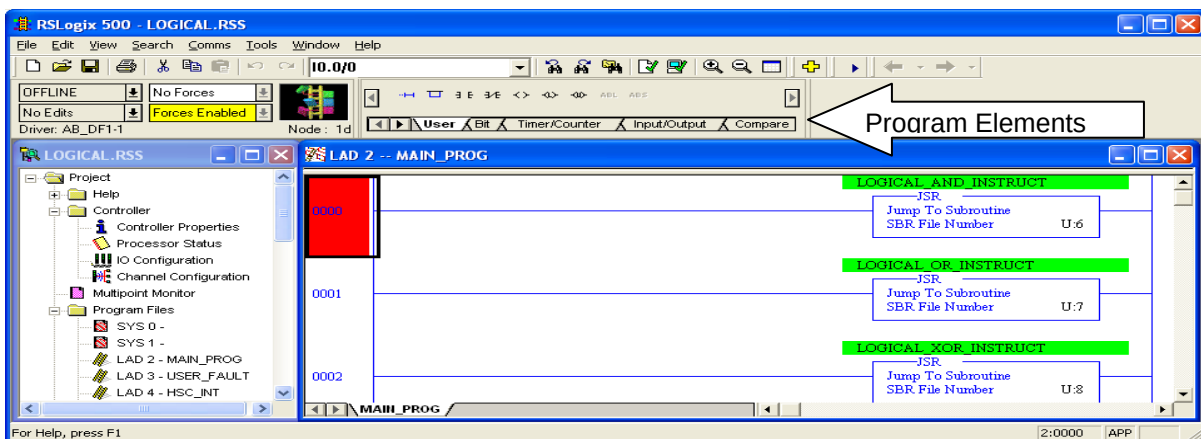
From RSLogix select the LAD File to be modified and double click on it to open it.

Try it and See below for Result,;



OPEN LAD FILE (STEP 3)

### 6.1.2 Programming in LAD language



PROGRAMMING IN LAD USING THE TOOLBAR

**Note: The program elements are located in the Toolbar.**

### 6.1.3 Exercise to "Save" a Project.

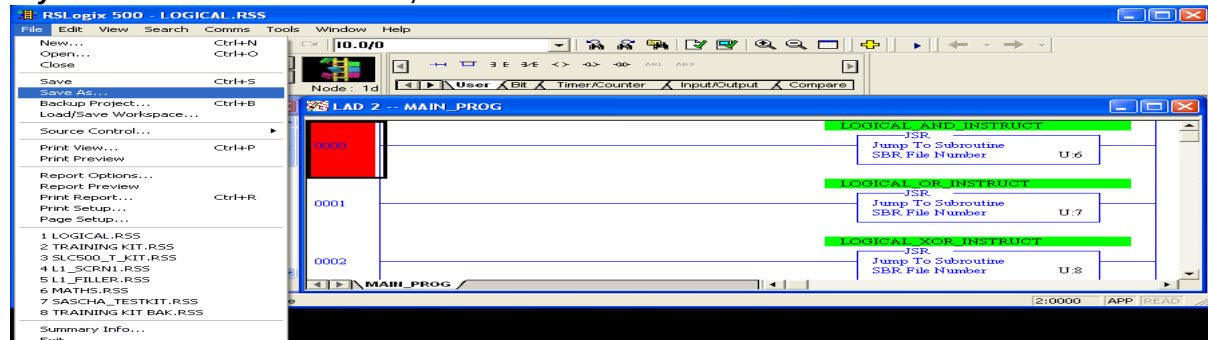
After editing and completing the Project one can save the edited Project to the hard disk by selecting one of the following methods listed below,

- From RS Logix 500 Menu **File > Save As**,
- Select the icon  in the Toolbar Menu in the project window.

#### 6.1.3.1 Exercise Save the Completed Edited Project using the File > Save As

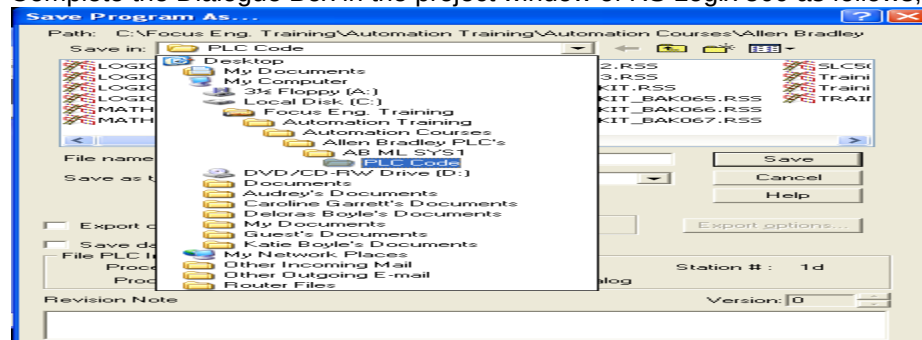
From RS Logix 500 select the **File > Save As** option from the project window as follows. Use the cursor keys, mouse or TAB key.

Try it and See below for Result,;



SAVE THE EDITED PROJECT USING FILE SAVE AS IN RSLOGIX 500 (OPTION 1)

Complete the Dialogue Box in the project window of RS Logix 500 as follows,

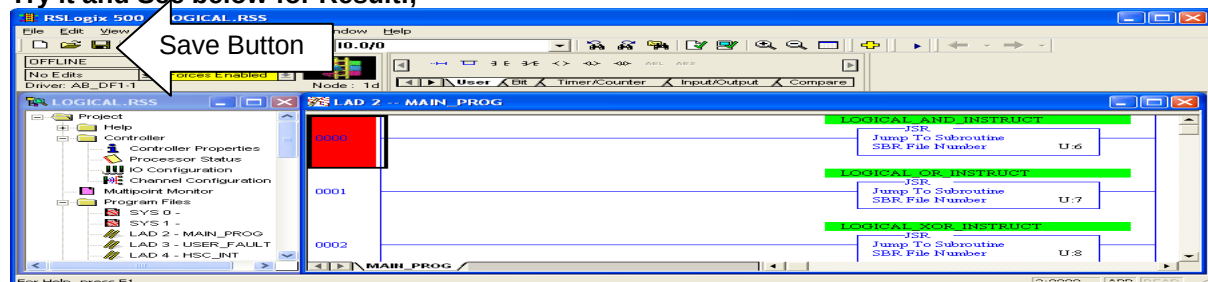


SAVE THE EDITED PROJECT USING FILE SAVE AS IN RSLOGIX500 (OPTION 1 CONT.)

#### 6.1.3.2 Exercise Save the Edited Block using the ICON "Save".

From RSLogix 500 select the Icon  "Save" option in the project window as follows. Use the cursor keys and the mouse to save the edited Project to the hard disk. The same Dialog Box will appear as with Option 1 previously discussed.

Try it and See below for Result,;



SAVE THE EDITED BLOCK USING THE ICON  "SAVE" IN RSLOGIX 500 (OPTION 2)

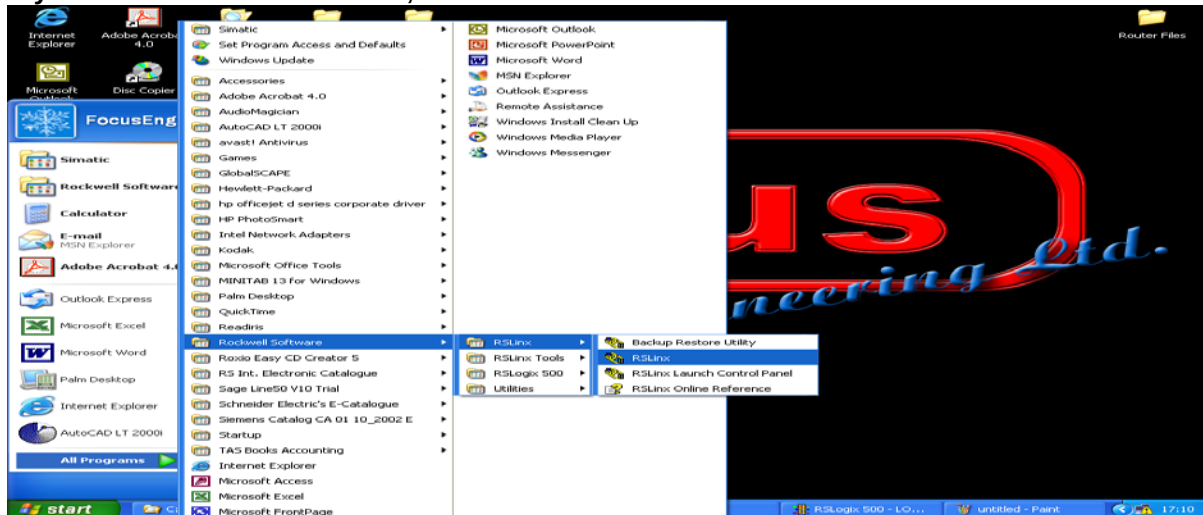
## 6.2 Set up Communication between PLC and Programming Device

Before one can communicate with an Allen Bradley PLC the Programming Device needs to be configured to do so. This is accomplished by using "RS Linx".

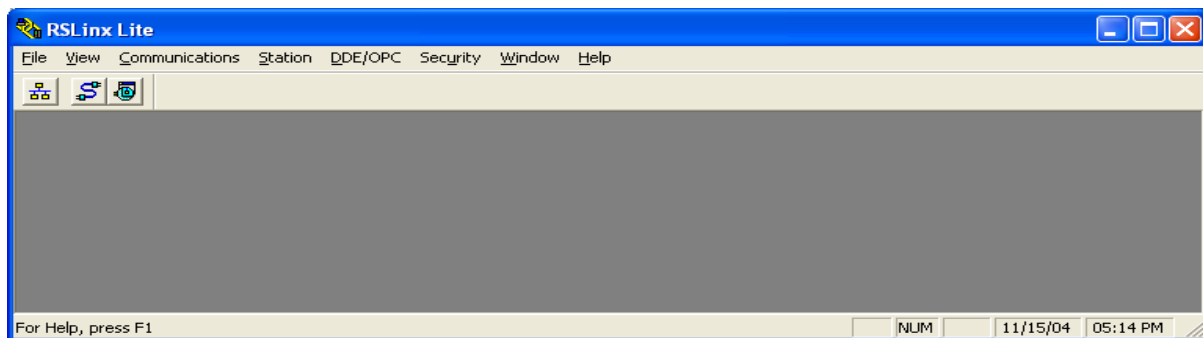
### Step 1 Open RSLinx

From the ICON "Start" Start Menu Command **Start > All Programs > Rockwell Software > RSLinx > RSLogix500** RSLogix Editor can be started. Use the cursor keys, mouse or TAB key to start the editor.

Try it and See below for Result:,



OPEN RSLINX USING START MENU.

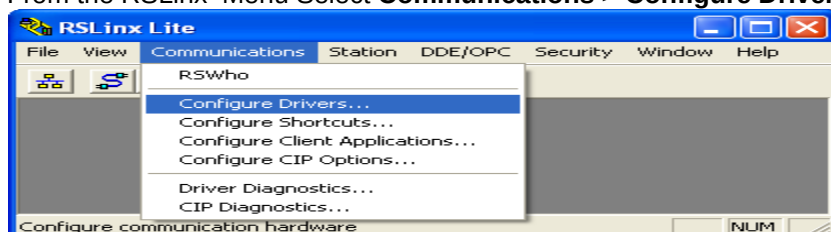


RSLINX USING START MENU

### Step2: Configure Communicates Driver:

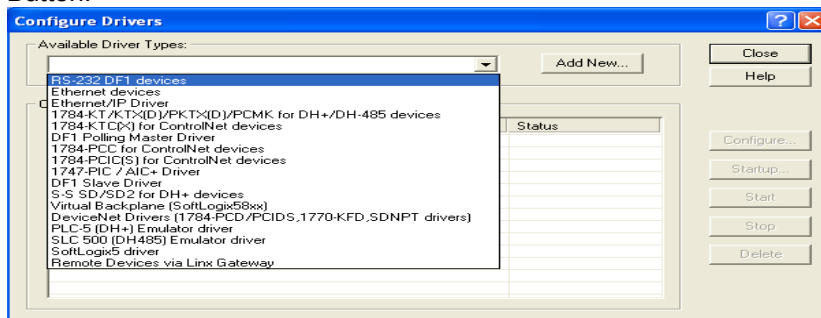
To configure the PLC to communicate to a PC a "Communications Driver" has to be setup using RSLinx. To select a driver for communication with a MicroLogix type of PLC use the following steps:

From the RSLinx Menu Select **Communications > Configure Drivers**



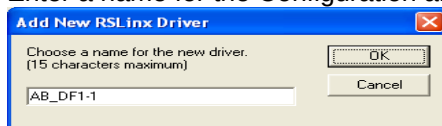
CONFIGURE DRIVERS STEP 1

A Dialog Box will appear. Using the Dropdown box select RS 232 DF1 Devices and Click “**Add New**” Button.



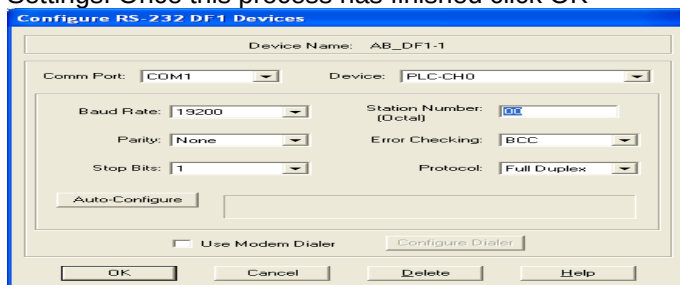
SELECT DRIVER TYPE

Enter a name for the Configuration and click OK to the Next Dialog Box.



ENTER CONFIGURATION NAME FOR DRIVER

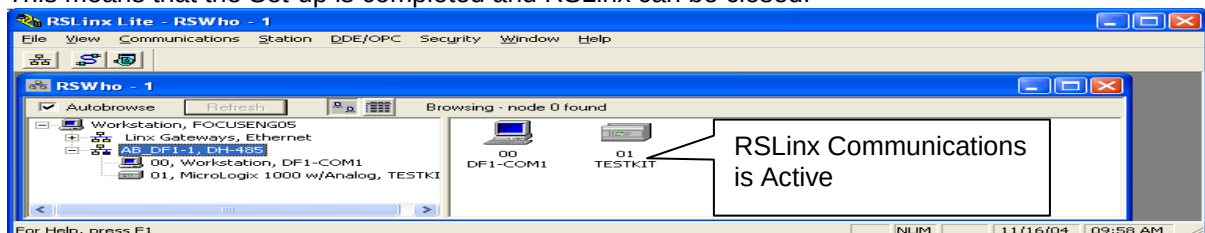
Make sure the PLC is Connected and click “**Auto Configure**”, this will determine all the appropriate Settings. Once this process has finished click OK



## DRIVER SETTINGS

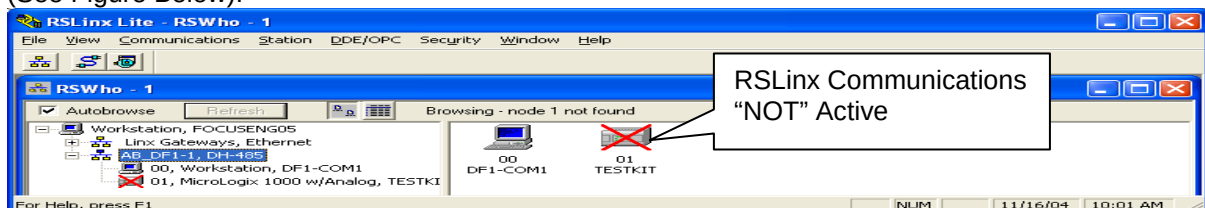
When the driver is configured correctly one can see the Programming Device and the PLC in RS Linx (See Figure Below).

This means that the Set-up is completed and RSLink can be closed.



## RSLNX VIEW OF ACTIVE COMMUNICATIONS.

If the driver is configured incorrectly one can see the Programming Device and the PLC in RSLinx (See Figure Below).



## RSLNX VIEW OF ACTIVE AND NOT ACTIVE COMMUNICATIONS

## 6.2.1 Exercise to Download Blocks to the PLC

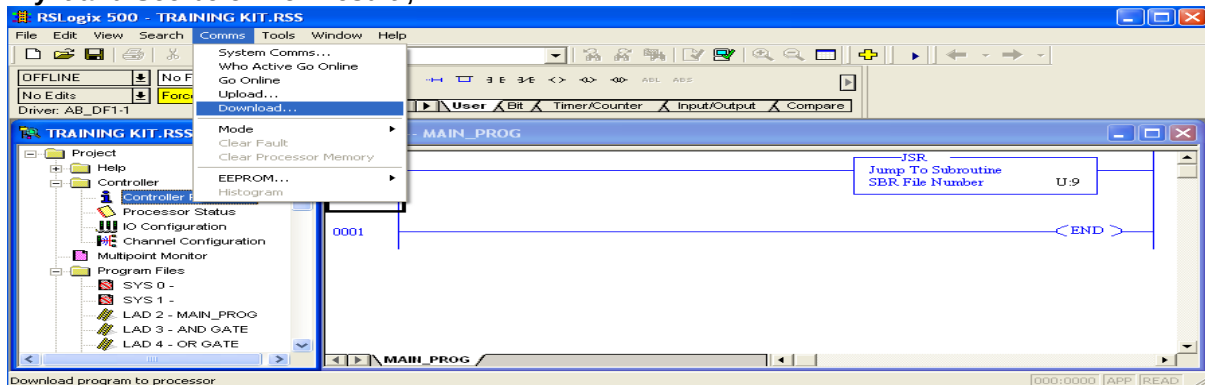
After editing and completing the Project one can “Download” the Program to the PLC by selecting one of the following methods listed below,

- From RSLogix 500 Menu **Comms > Download**,
- Select the icon  and select “Download” from the Toolbar Menu in the project window of RSLogix 500.

### 6.2.1.1 Exercise LAD File using the Comms > Download

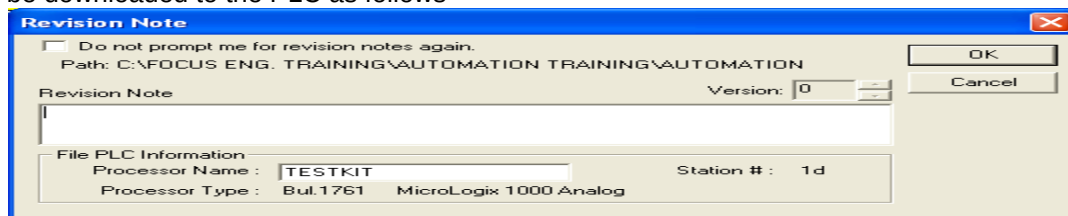
From RSLogix 500 select the **Comms > Download** option as follows. Use the cursor keys, mouse and Return keys to select the “Download” Function,

Try it and See below for Result;



DOWNLOAD THE EDITED PROJECT RSLOGIX MENU (STEP 1)

Complete the Dialogue Box in the project window of RSLogix 500 to confirm the selected Project to be downloaded to the PLC as follows



CONFIRM THE DOWNLOAD OF THE EDITED PROJECT TO THE PLC

## 6.2.2 Offline / Online View in RSLogix 500

“Offline” and “Online” view in RSLogix500 is used to display the project structure stored on the hard disk “Offline” or in the CPU “Online”.

To select and change from “Offline” to “Online” use one of the following methods listed below,

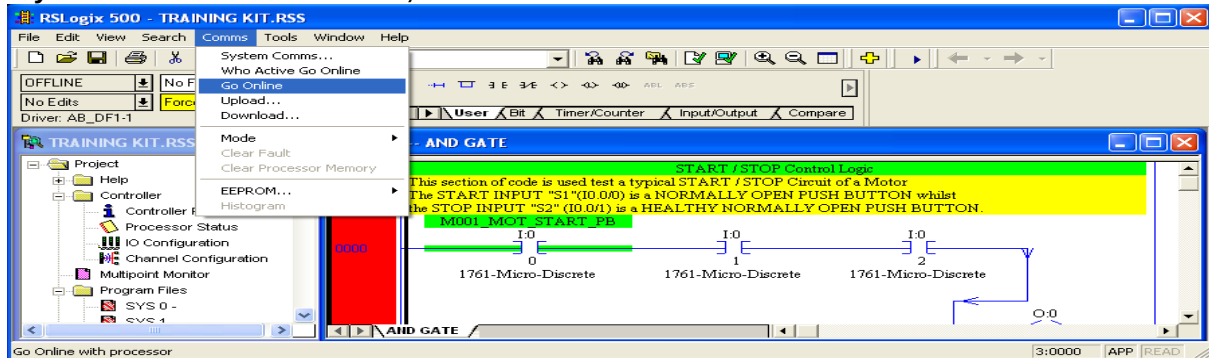
- RSLogix 500 select in the Menu **Comms > Go Online**.
- Select the icon  from the Toolbar Menu in the project window of RSLogix 500 and select Go Online.



**6.2.2.1 Exercise Select "Online" Function RSLogix 500 using "Comms > Go Online" Menu**

From RSLogix 500 select the **Comms > Go Online** option as follows,

**Try it and See below for Result;**

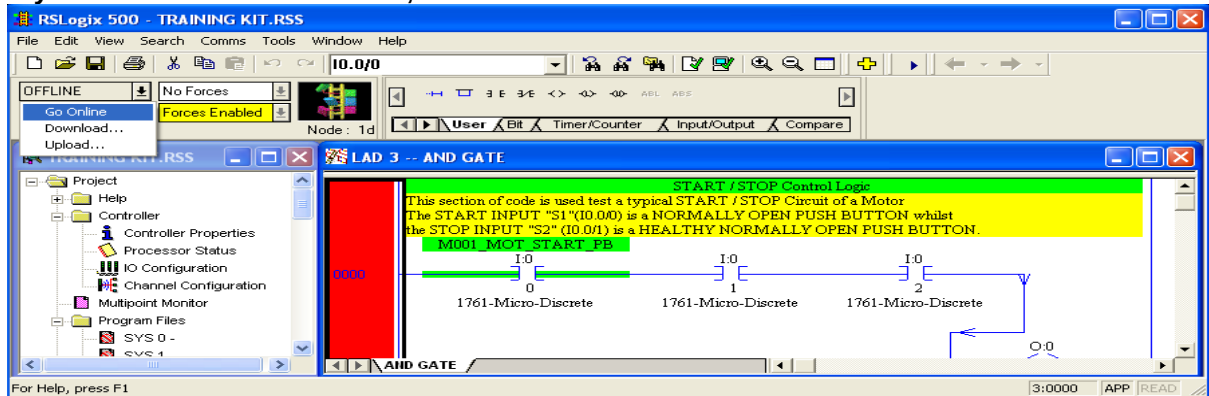


RSLOGIX 500 SELECT ONLINE VIEW (OPTION 1)

**6.2.2.2 Exercise Using the RSLogix 500 Icon  select Online.**

From the toolbar in RSLogix 500 select the icon  online option as follows,

**Try it and See below for Result;**



RSLOGIX 500 SELECT ONLINE VIEW USING ICON (OPTION 2)



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## 6.3 Check what you've learnt this Chapter

I Know:

- ⇒ How to Start "**RSLogix 500**" & Open a Project.
- ⇒ How to open a **LAD File** using RSLogix 500.
- ⇒ How to set-up "**RSLink**".
- ⇒ How to "**Save**" or "**Download**" Projects to the Hard Disk or PLC.
- ⇒ How to "**Go Online**" or "**Go OffLine**" to the PLC.

## 6.4 I Can:

- ⇒ Start "**RSLogix 500**" & Open a Project.
- ⇒ Open a "**LAD File**" using **RSLogix 500**.
- ⇒ Set-up a communication link between using "**RSLink**" PC and PLC.
- ⇒ I can "**Save**" or "**Download**" Projects to the Hard disk or to the PLC's CPU.
- ⇒ I can "**Go Online**" or "**Go OffLine**" to the PLC.