WEL-COME TO
CoiNel Technology Solutions LLP

Presentation on

Keil uVision4 Programming

Getting Started…

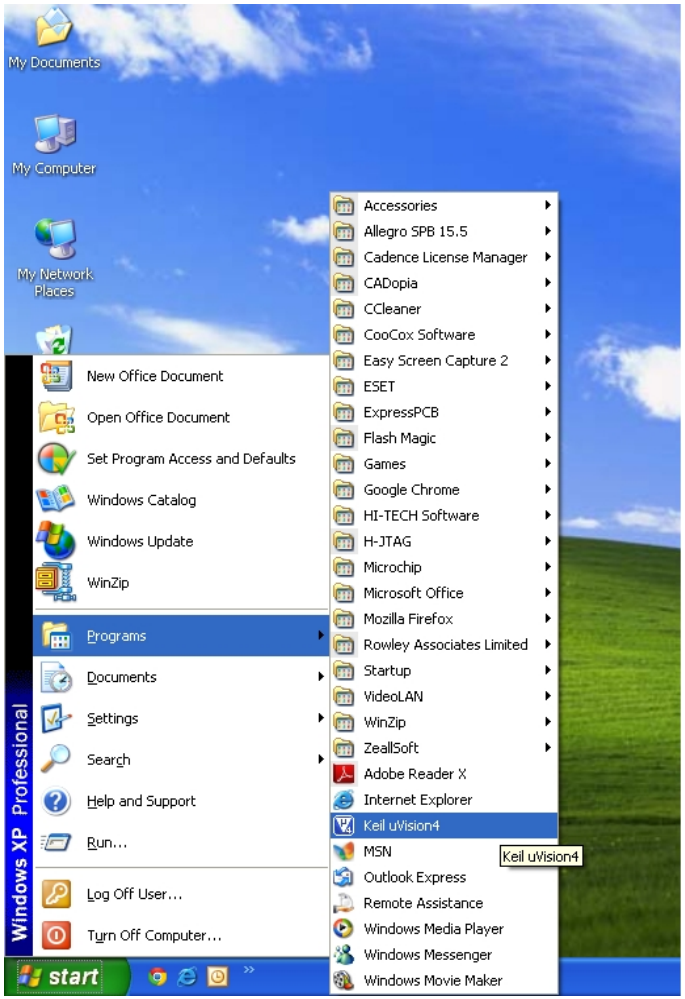
To Start Keil uVision4 IDE:

➢Go to **Start → Programs**

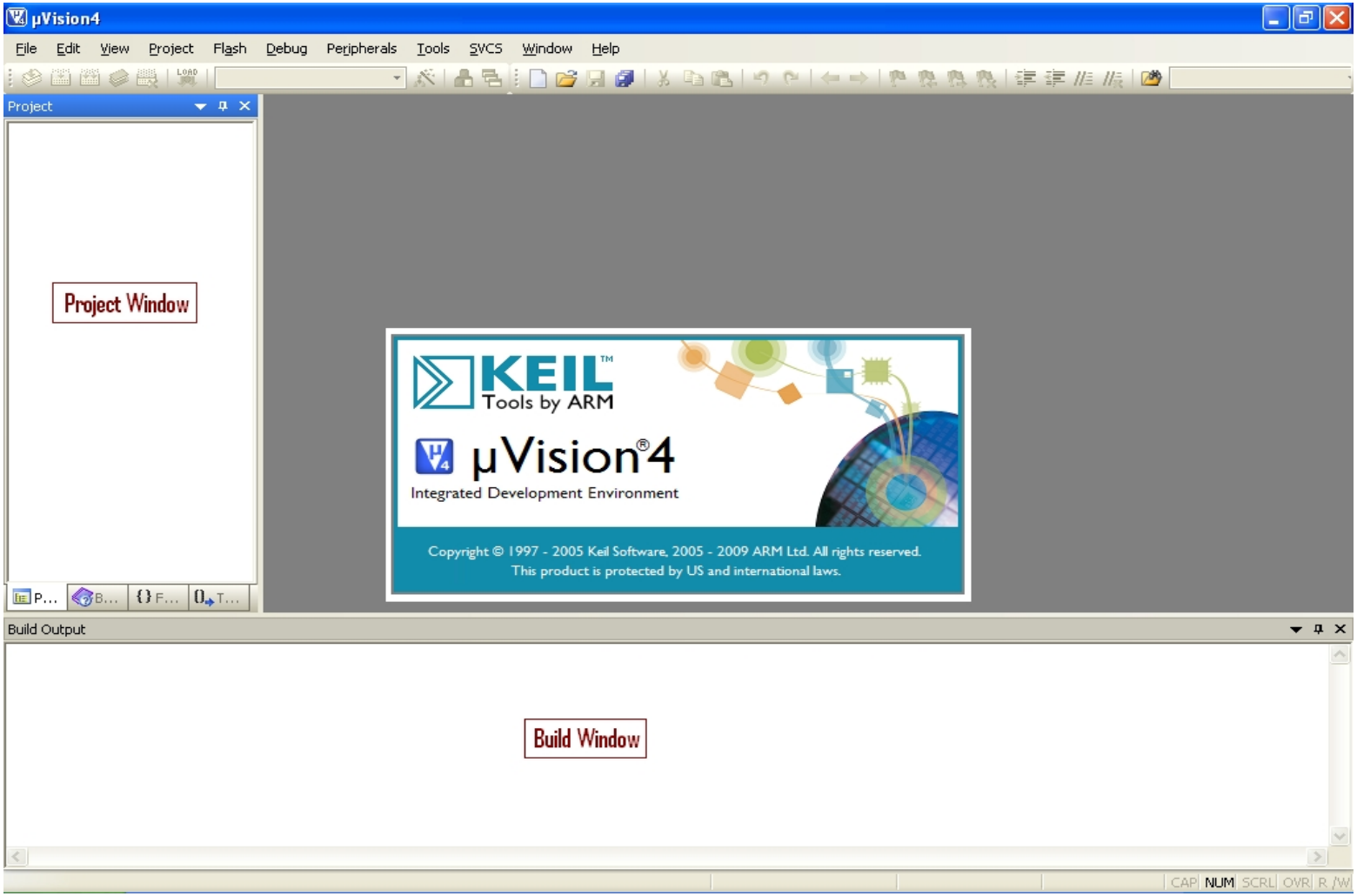
From the pull down menu of

➢**Programs → Select Keil uVision4**

Note: You can also double click on short cut icon of Keil uVision4 on the desktop.



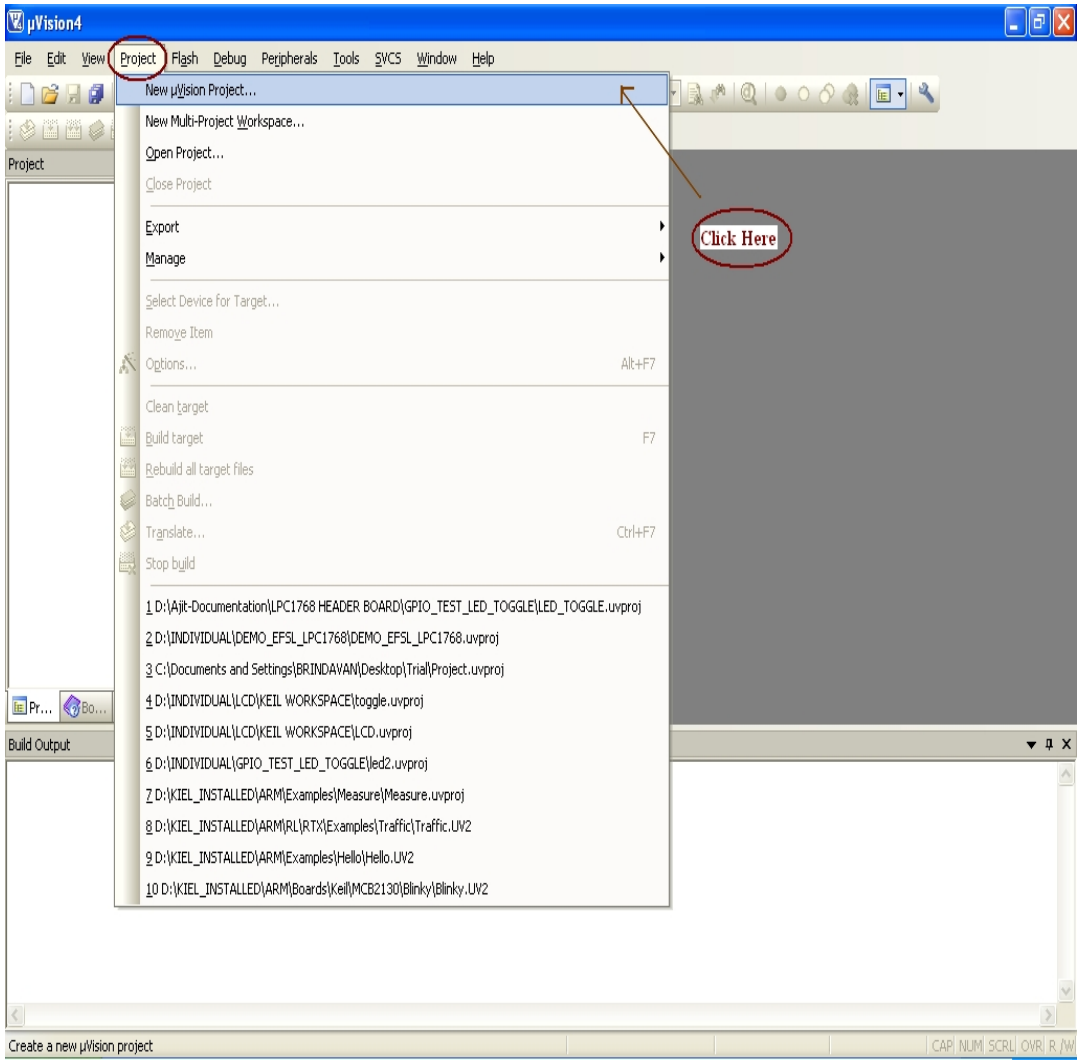
Keil's First Page



How To Create a Project???

To create a project:

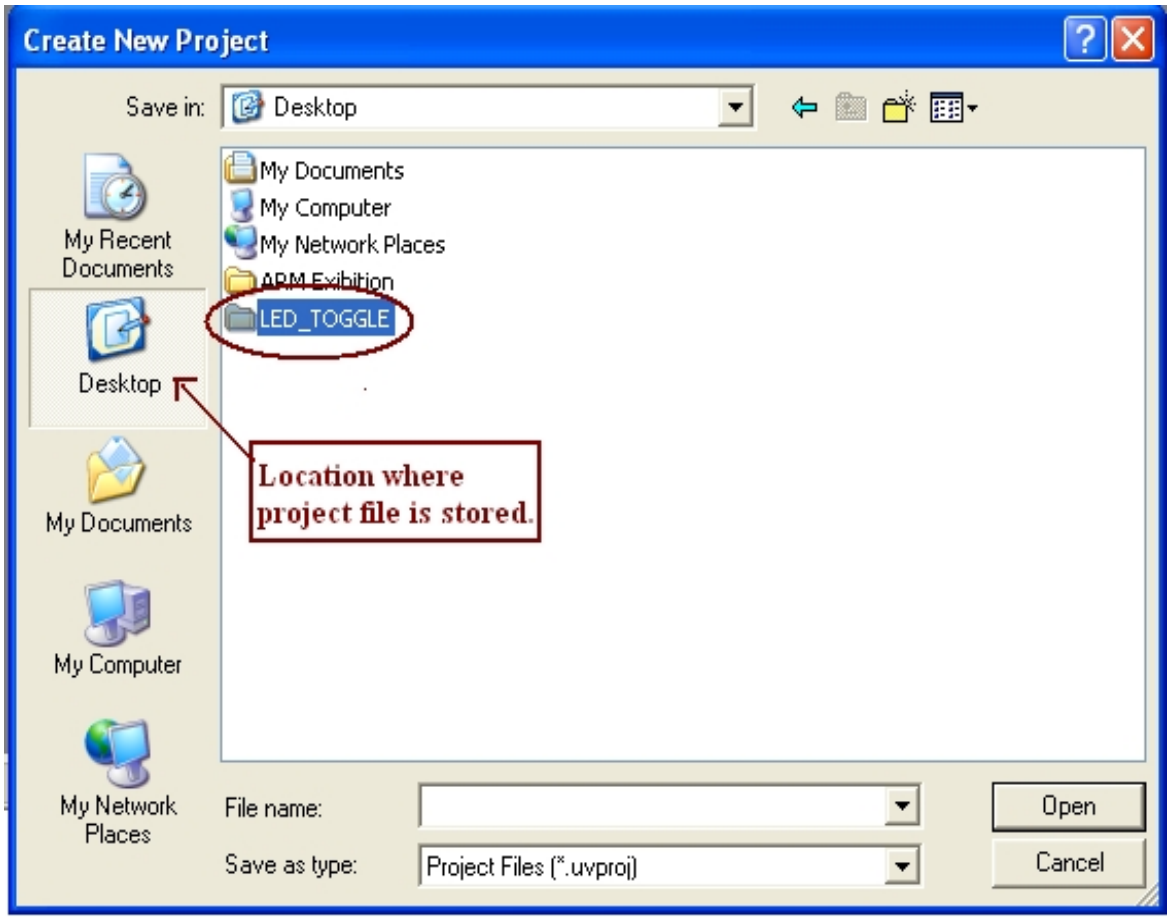
- ***Go to Project menu.***
- ***Click on New uVision Project.***



Where to save created project??

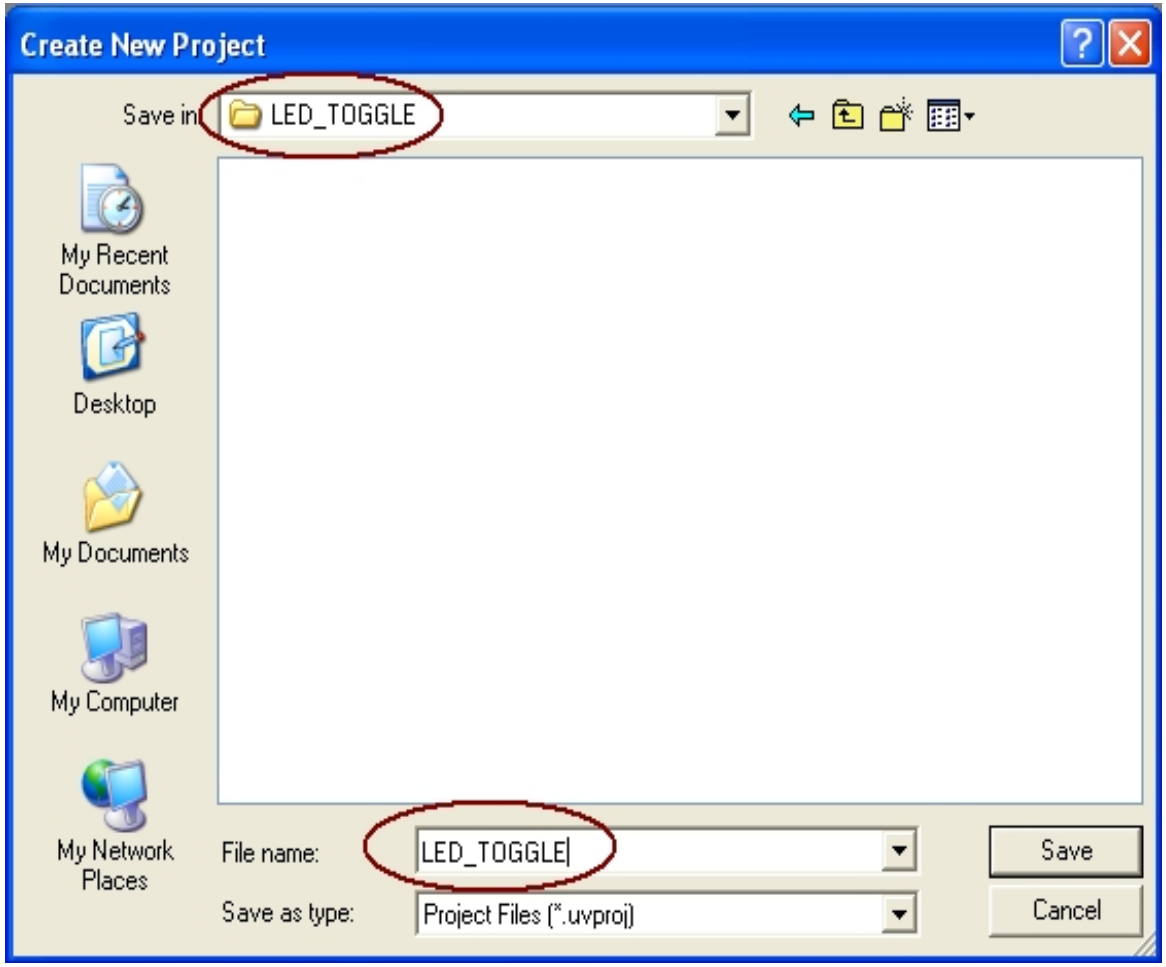
After Clicking on New uVision Project, you need to create a folder of your project & save it at specific location.

In the image, you could see, that a folder named LED_TOGGLE is created & saved at Desktop location.



Name of the File???

After creating folder, give specific file name & save it in your project folder.

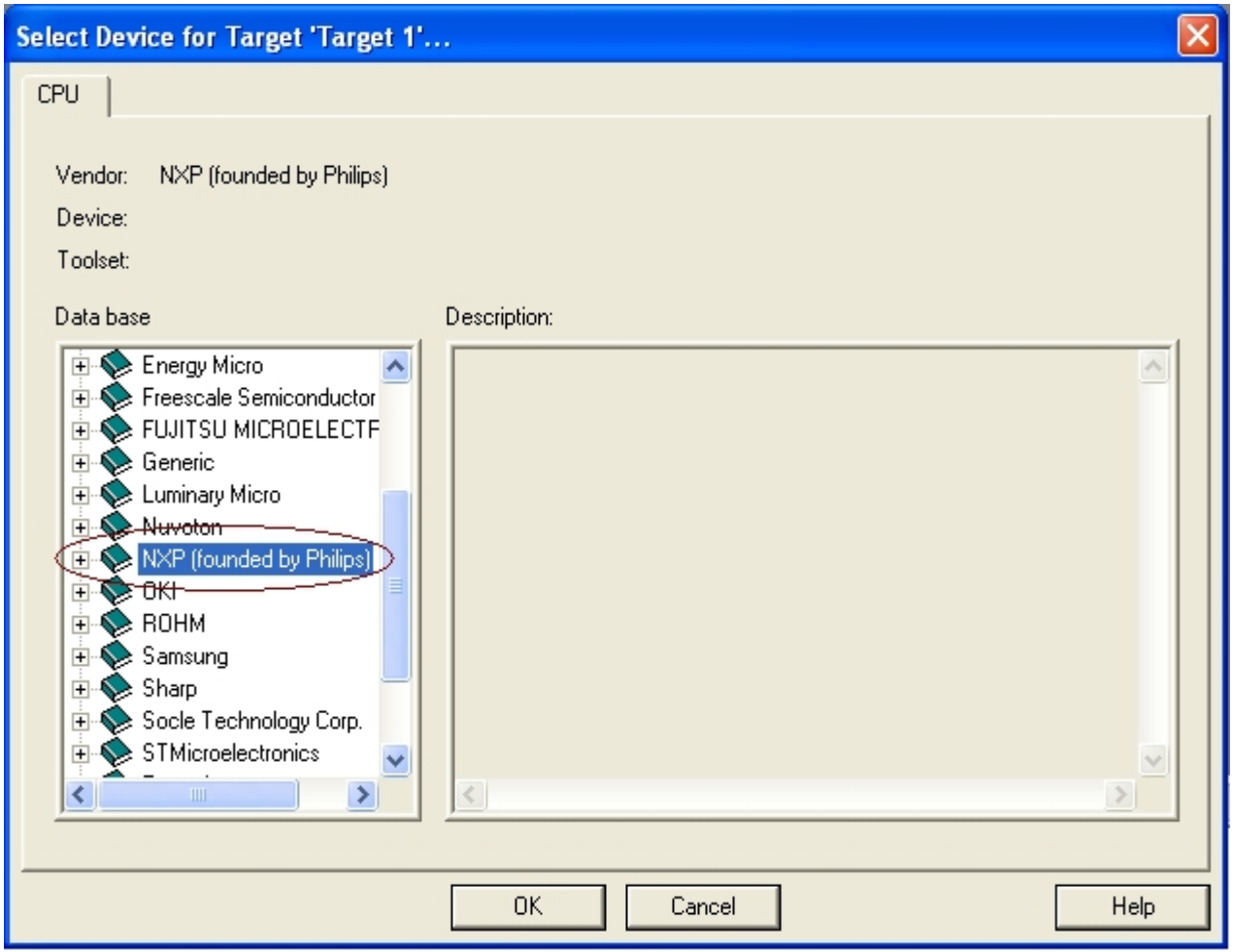


Controller Vendor

Select Appropriate Controller vendor as per your application needs.

In the Image, observe that highlighted text shows that controller vendor is NXP.

Click on +sign beside NXP.

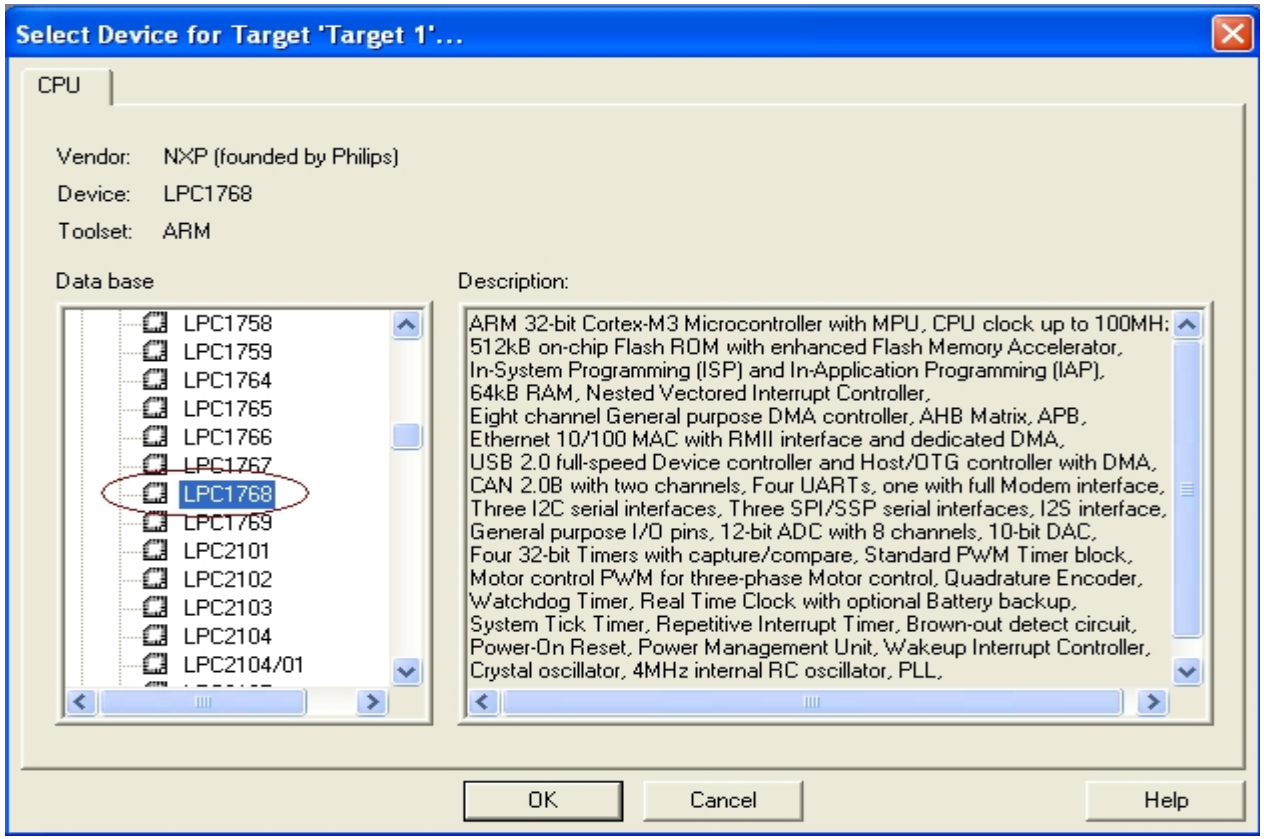


Selection of Controller

Next step after selecting controller vendor, is to select appropriate controller as per your application needs.

Here, we have chosen, LPC1768 as an example.

After, you select the controller & press OK, you would find dialog box as in Fig 2.,here click Yes.

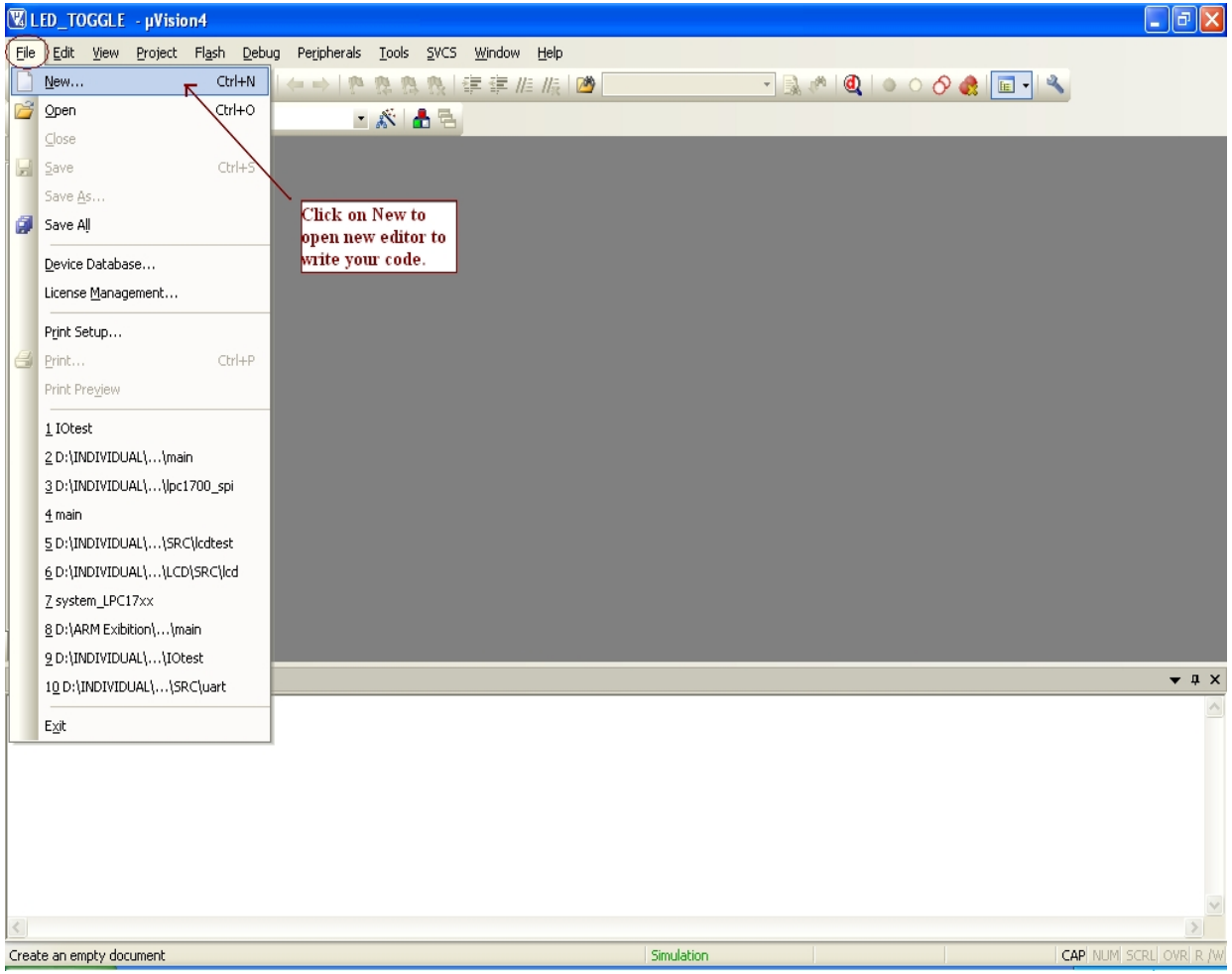


Where to write code???

To start writing code:

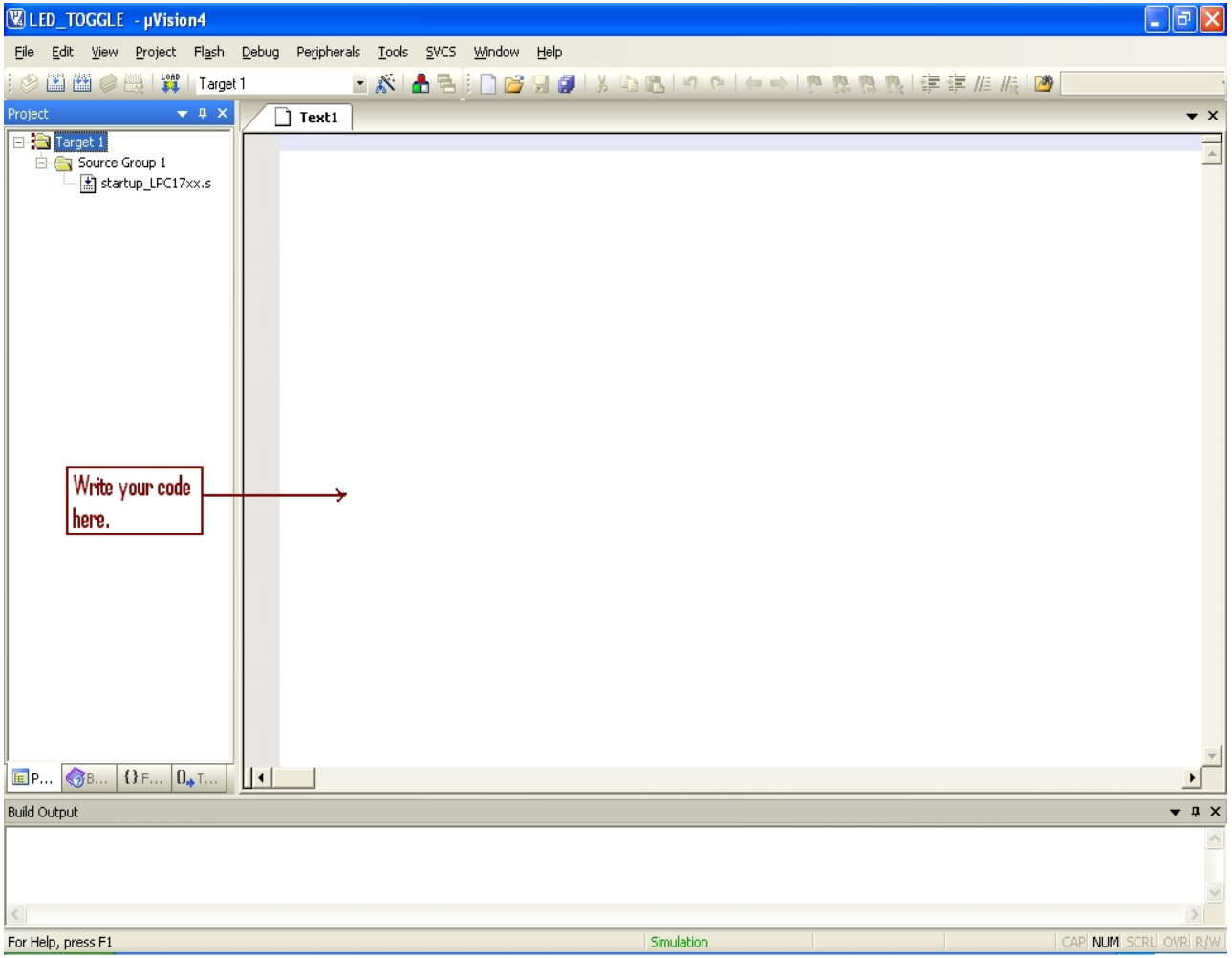
Go to File → New

It opens an editor where you can write your code.

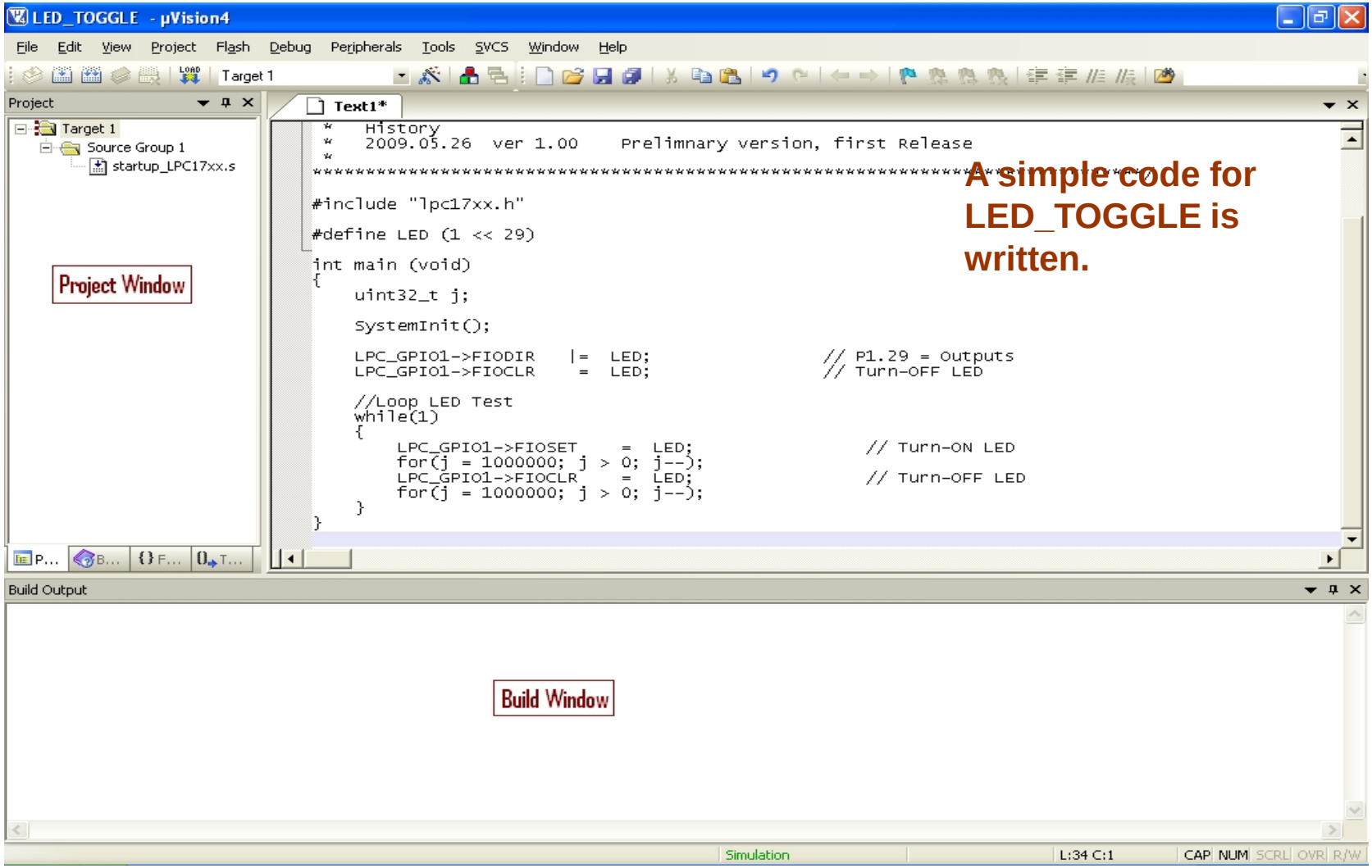


Code Editor

This is how your code editor looks.



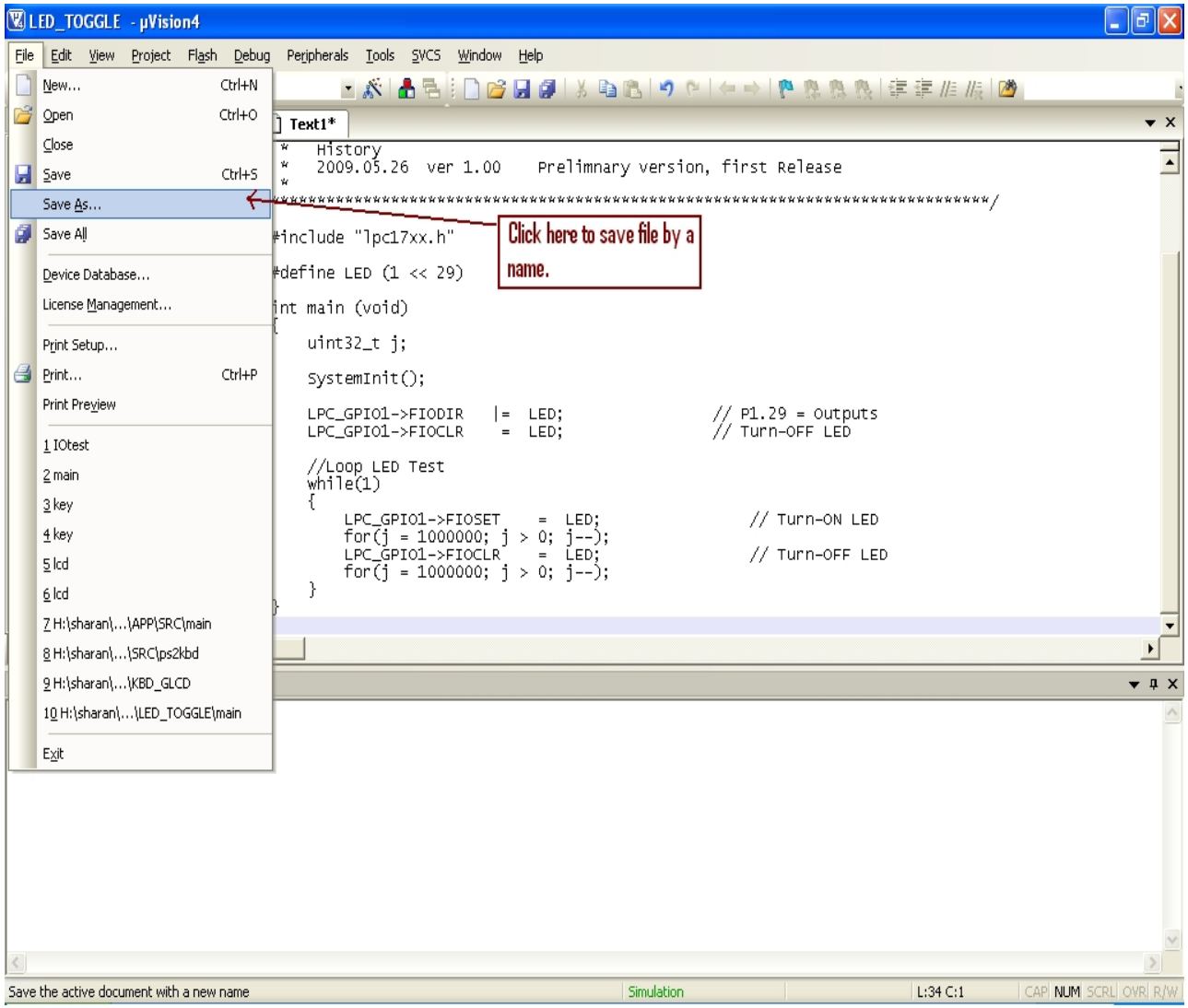
Window After Writing Code



Saving your File

To save a file,

Go to File → Save As

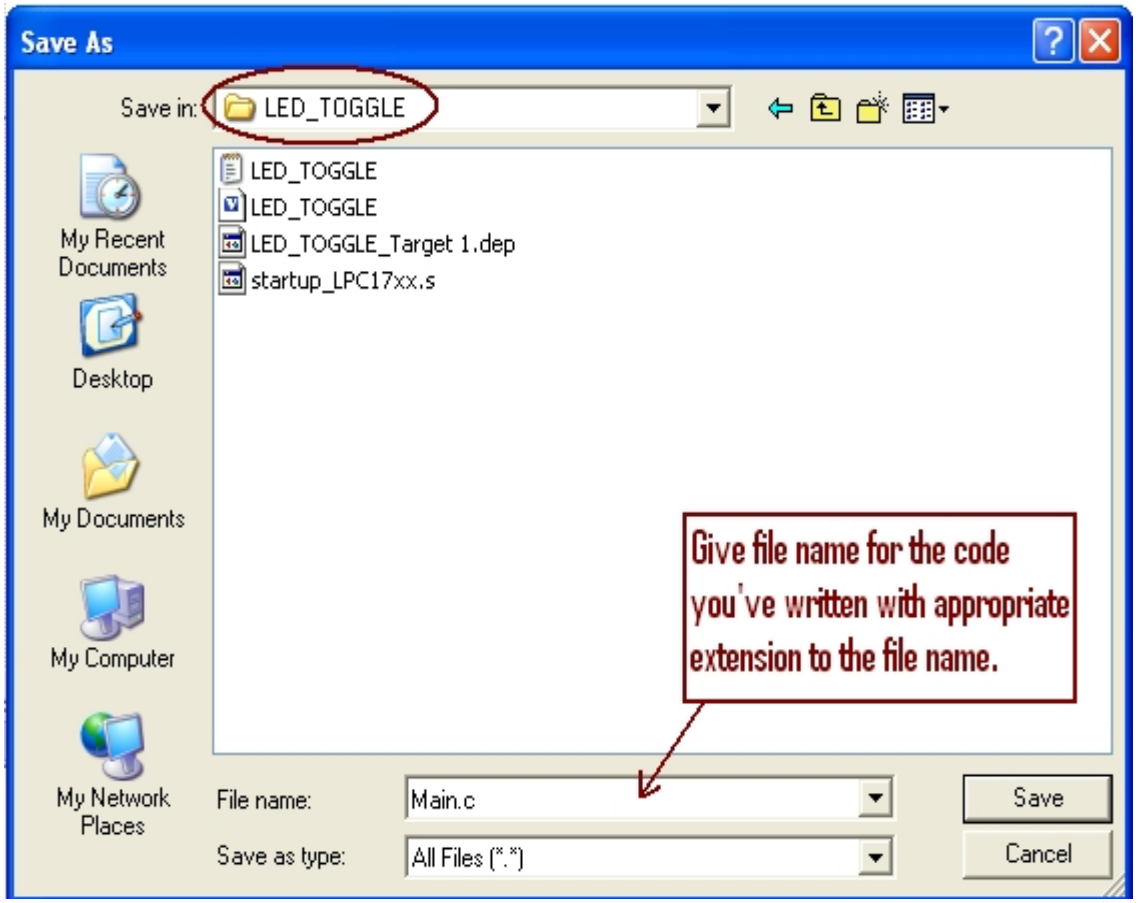


Saving a file by a name!!

After writing code,

Save file in the location where you've created & saved your project.

Give appropriate name for the file as shown in the figure.



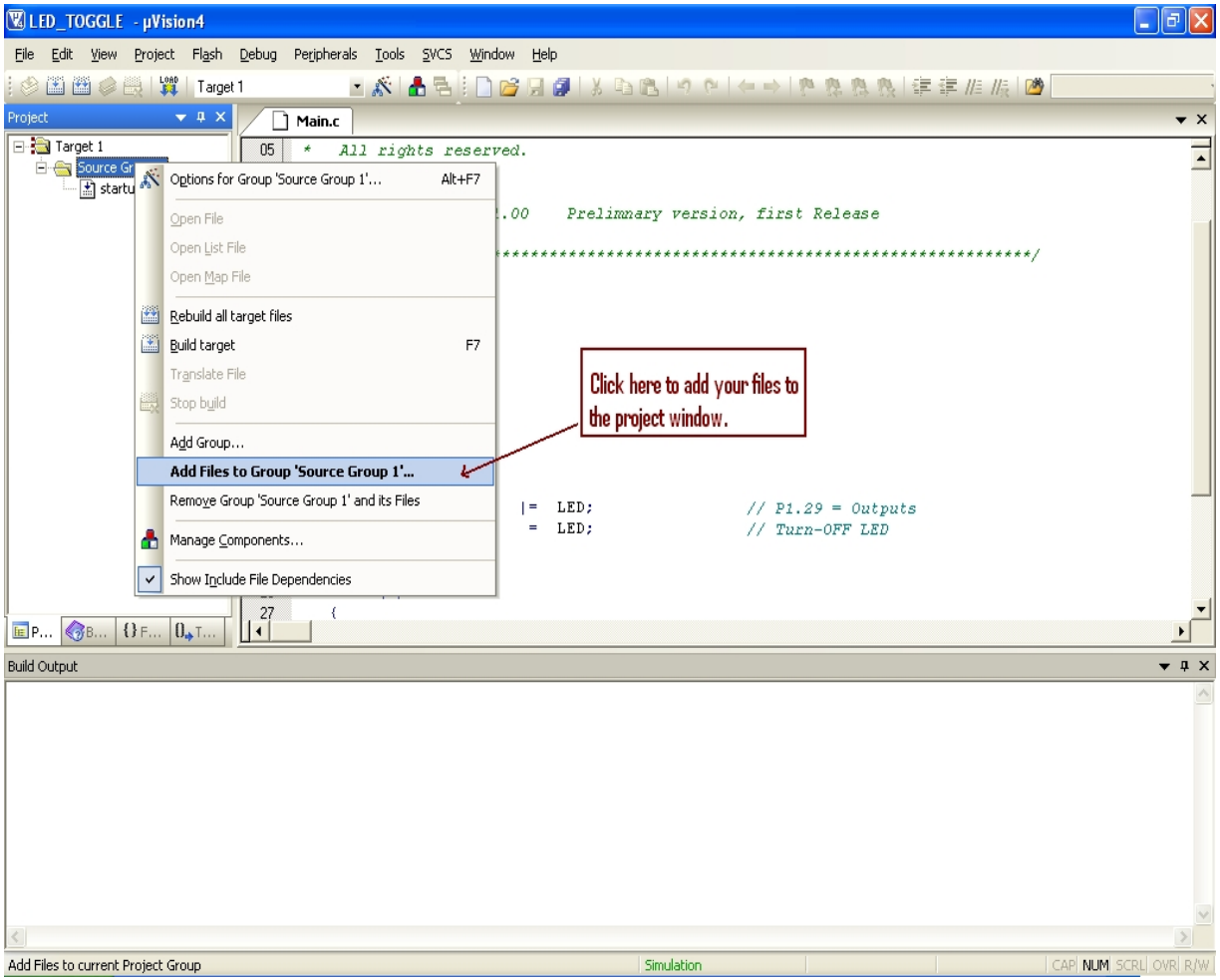
Note: For source files, give file name extension as **.c (dot c)** & for header files as **.h (dot h)**

Adding Files to group… (1)

After saving the file, you need to add the file to the source group.

To add files to the source group,

Right click on source group → In the pull down menu, select Add files to Group as shown in the image.



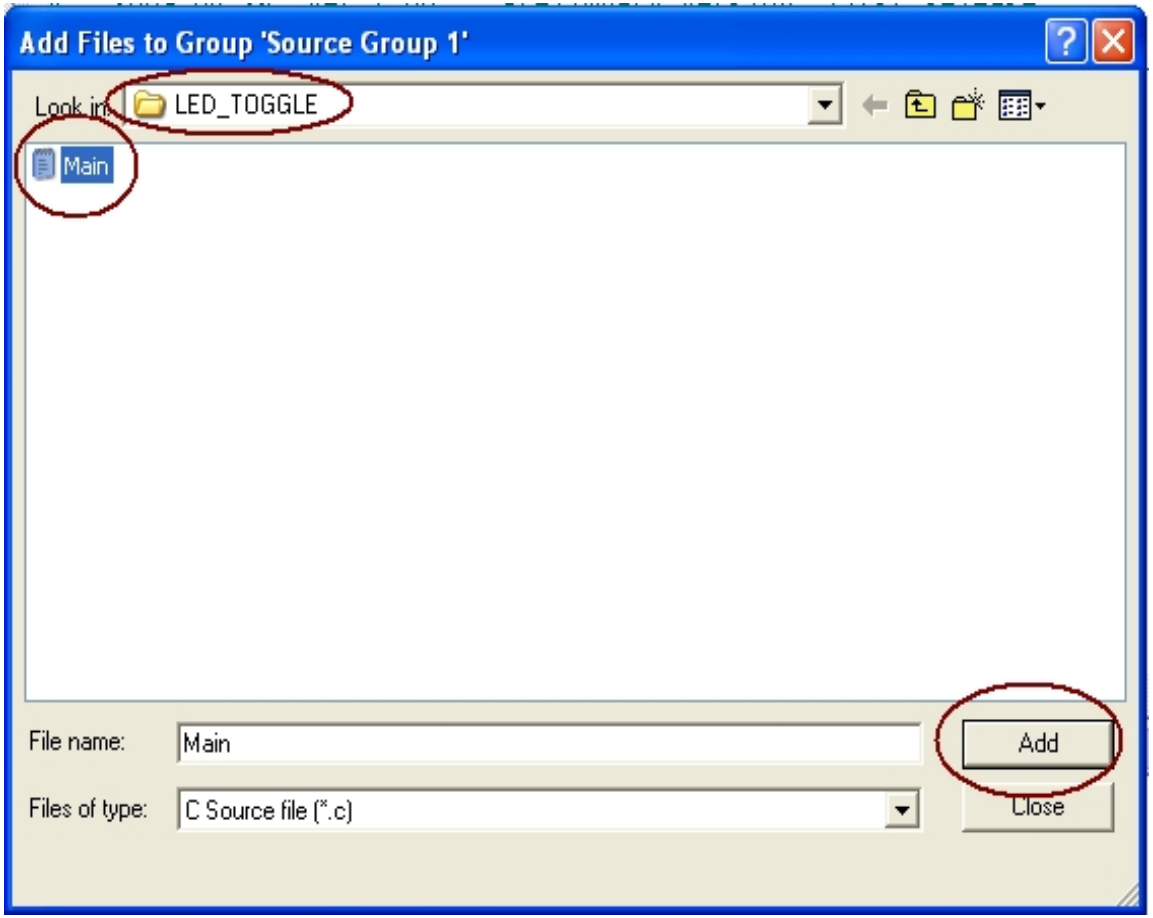
Adding Files to Group... (2)

Contd., from previous slide.

After clicking on Add files to source group as in previous slide, select the file you want to add.

In the image, you can see that previous written MAIN (c source file) is selected.

Then Click on Add button to add the file.

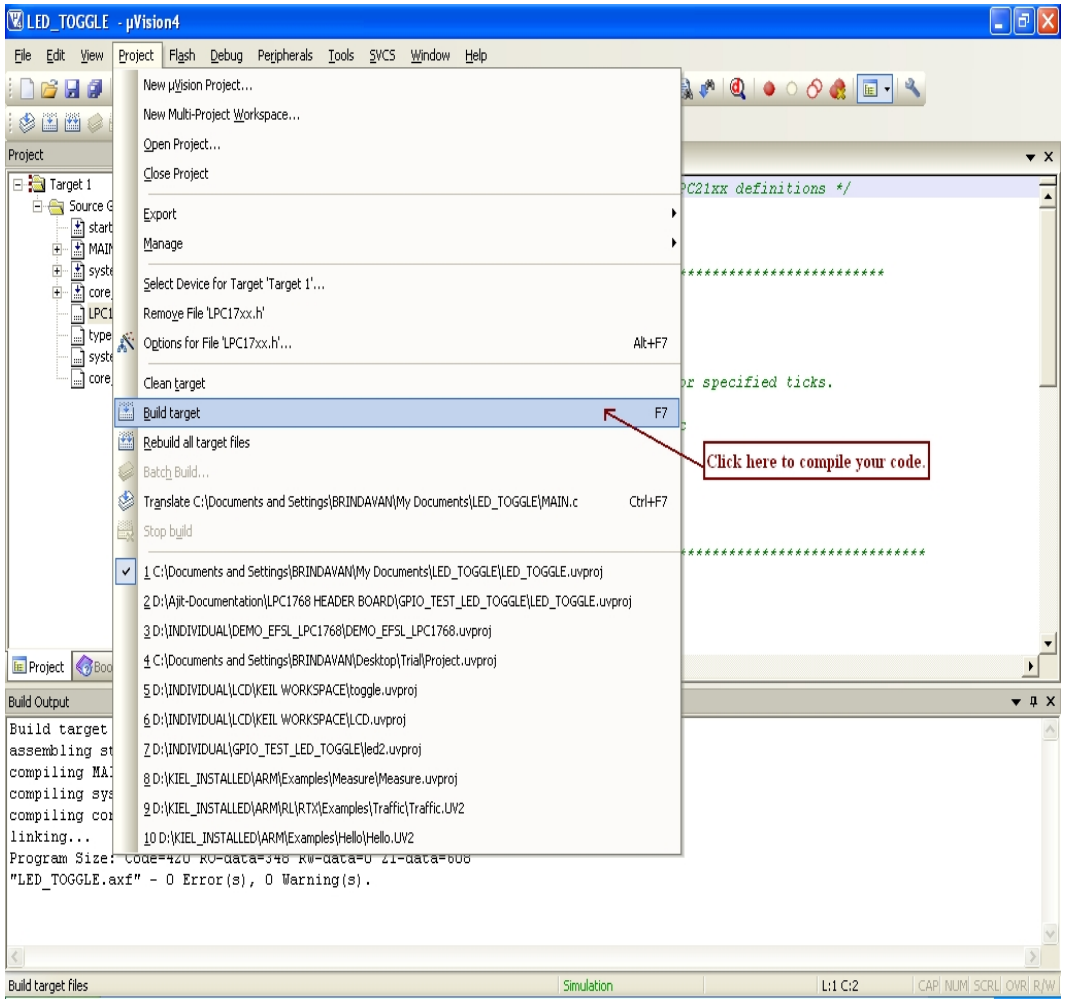


Compiling the project!!!

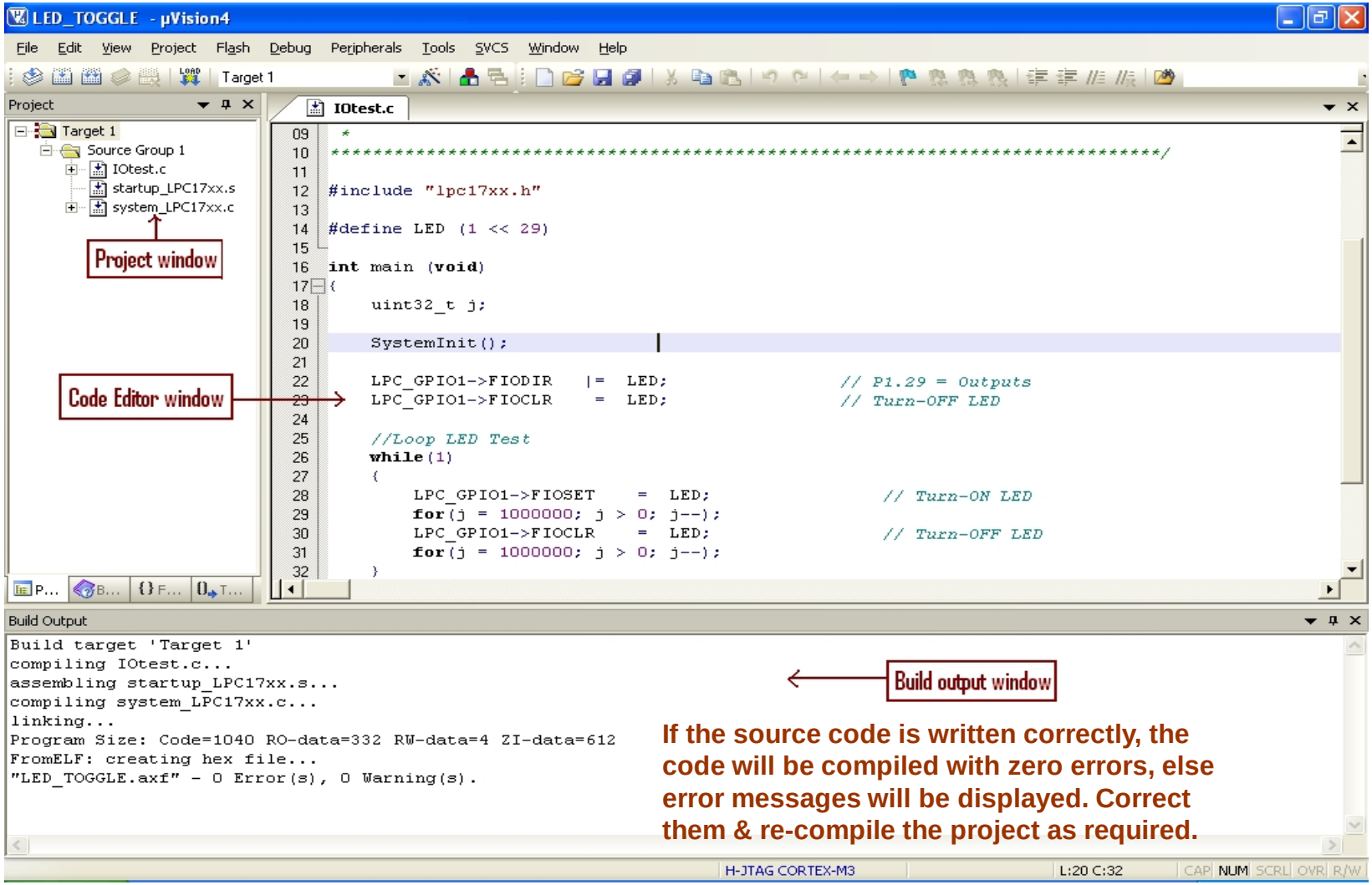
After writing code & adding files to the source group, next step is to compile the code.

To compile the code,

Go to project → Build target

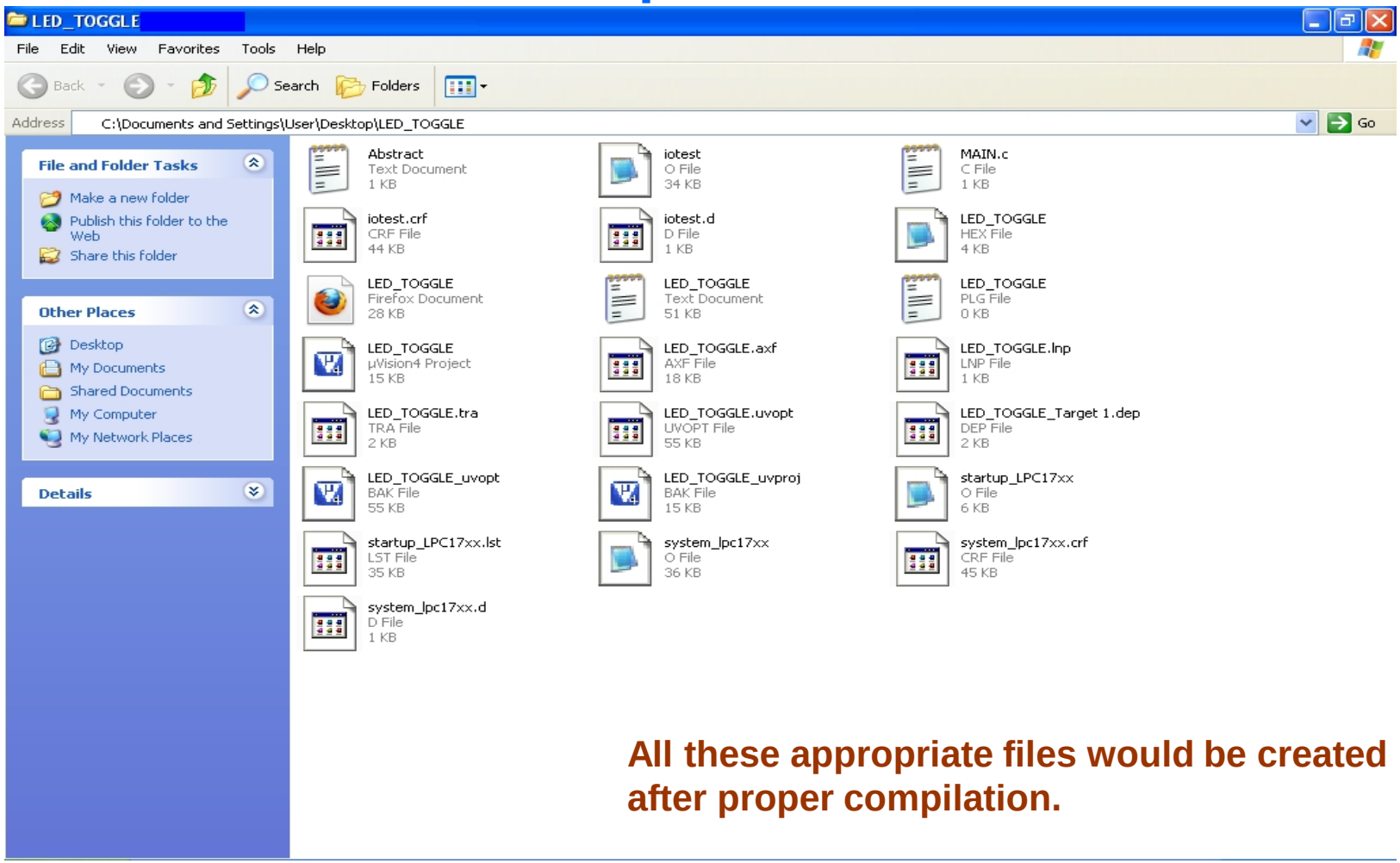


Screen after code is compiled



If the source code is written correctly, the code will be compiled with zero errors, else error messages will be displayed. Correct them & re-compile the project as required.

Files in Project Folder after Compilation!!!



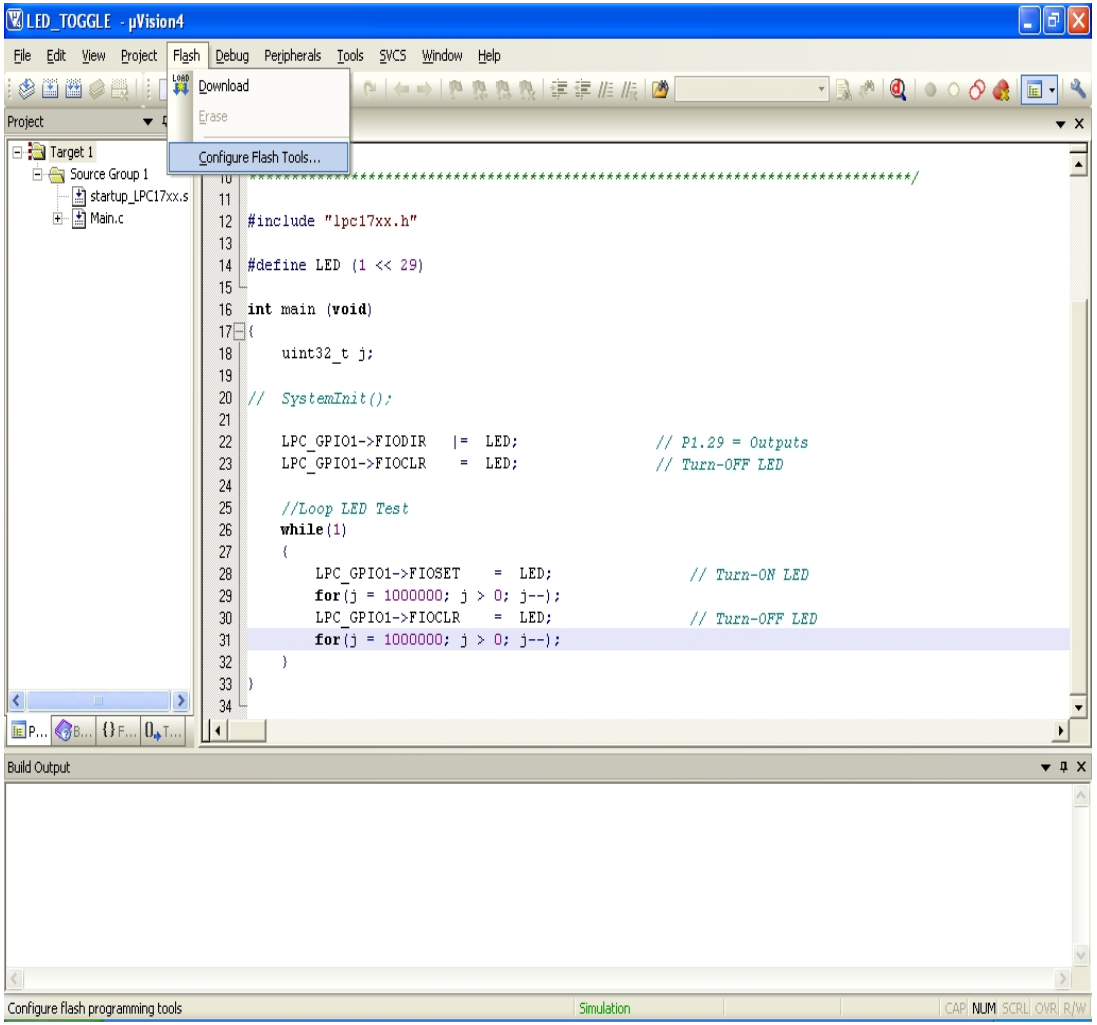
All these appropriate files would be created after proper compilation.

How to create Hex file???

To create Hex file:

Go to Flash → Configure Flash Tools

It opens up a dialog box which is shown in next slide.



Creating Hex file….(2)

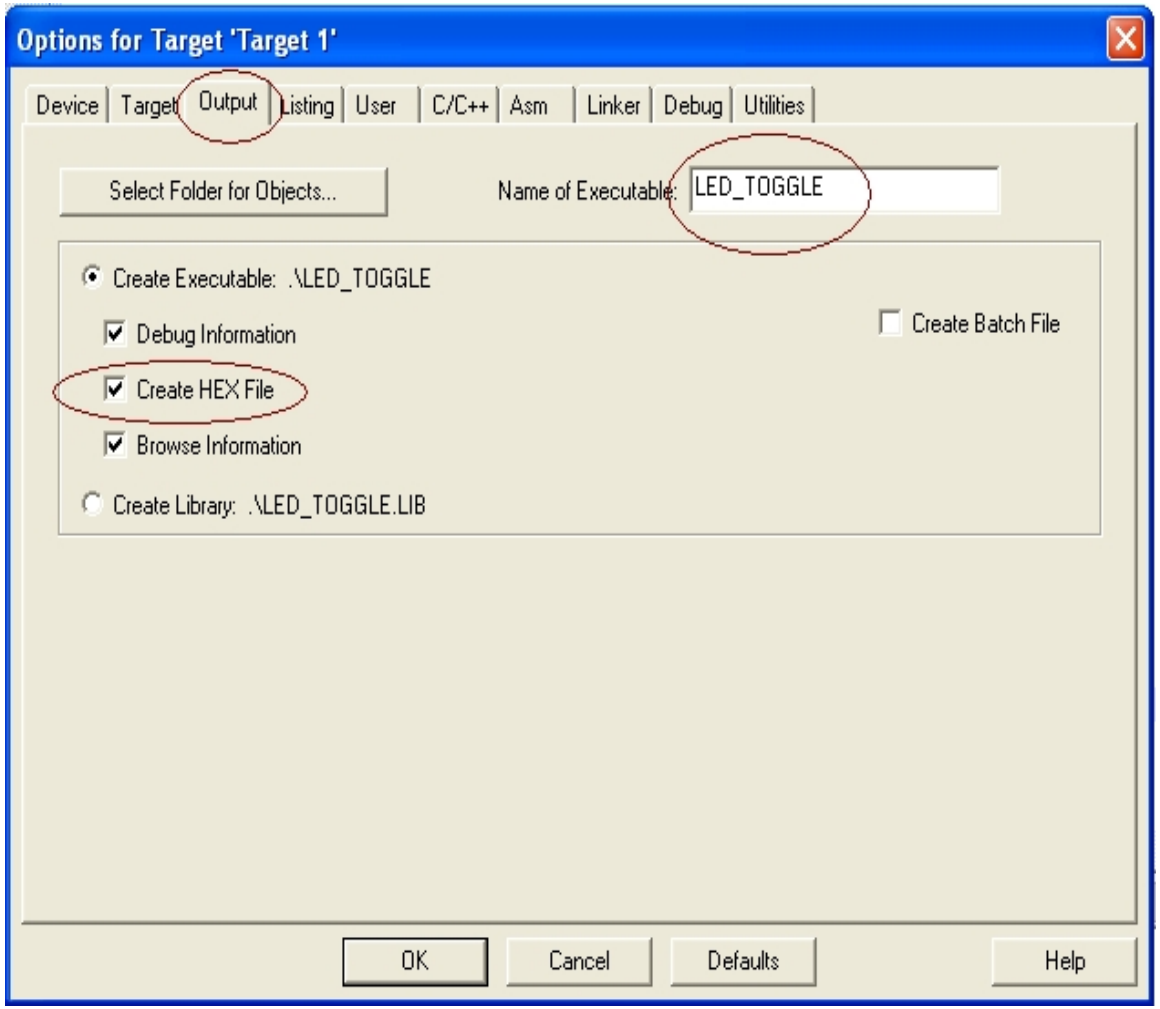
Contd., from previous slide.

Click on Output Tab.

Tick mark the check box, Create HEX File.

Enter Name of the executable as you want your hex file name to be.

Then Click OK button & re-build the code again.



Now you have come to know the steps of Creating & Compiling a project using

Keil uVision4

To know how to debug your programs using CoiNel JTAG check documentation on

- Using CoiNel Parallel Port JTAG with H-JTAG software
- Using CoiNel ARM USB JTAG with Coo Cox Co-Link

Technical Forum: www.coineltech.com/forums

To know how to download programs on boards, check tutorials on Flash Magic.