

## *Eclipse* Setup Instructions

Assure that *Eclipse* has been installed on your computer.

You will also require a USB memory device. Assure that the USB device is plugged in to a USB port and appears in “**My Computer**” as a hard drive with an assigned letter. Create an empty folder named “**Eclipse**” on the USB memory device’s root directory.

Run the *Eclipse Oxygen* program.

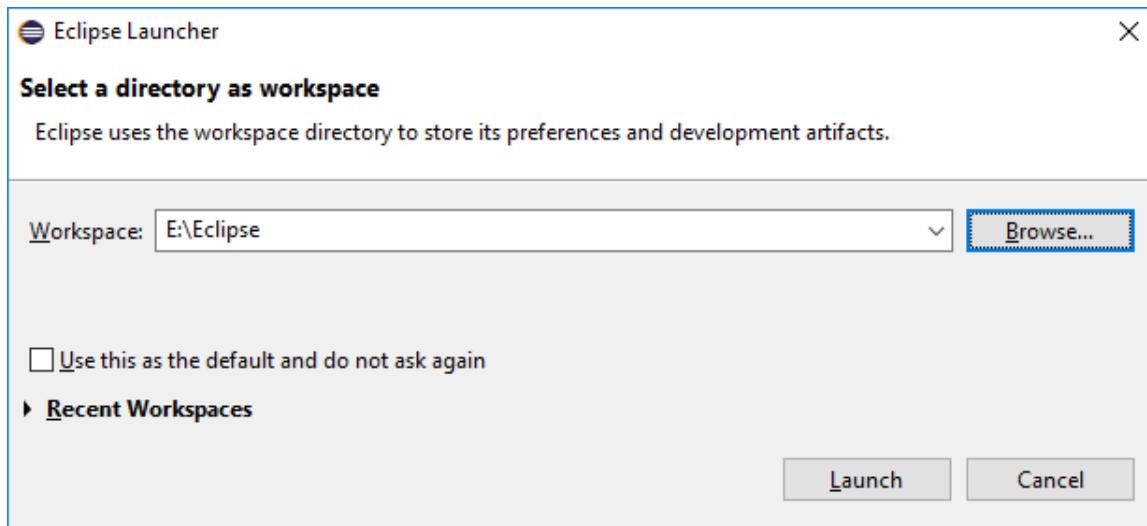
The following “splash screen” should appear. Wait for the program to be loaded.



## Specify a Workspace Location

You will be prompted to enter a “workspace.” Navigate to the **Eclipse** folder you created on the USB memory device.

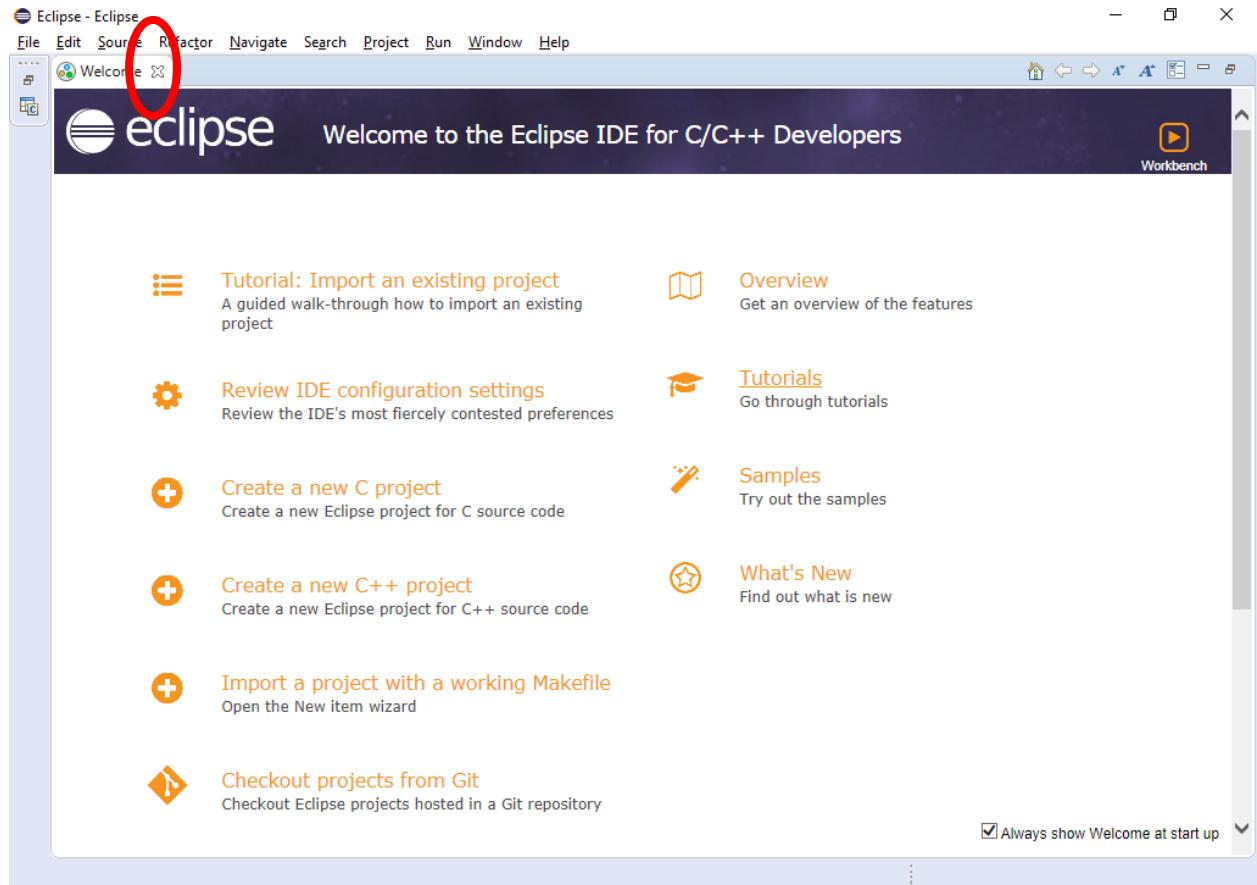
Click **Launch** to continue.



## Eclipse Starts

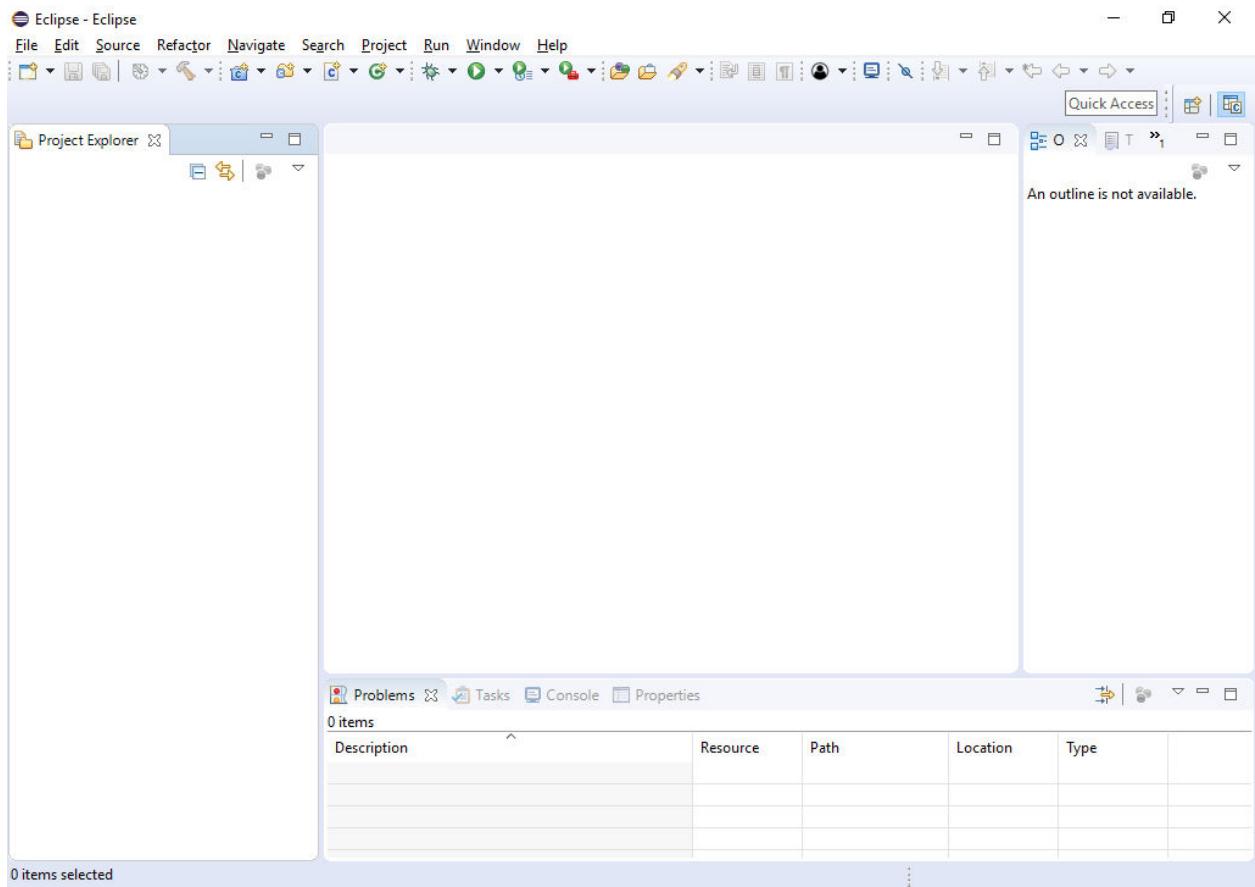
The initial *Eclipse* welcome window will be displayed.

Close this window to continue.



## The Main *Eclipse* Window

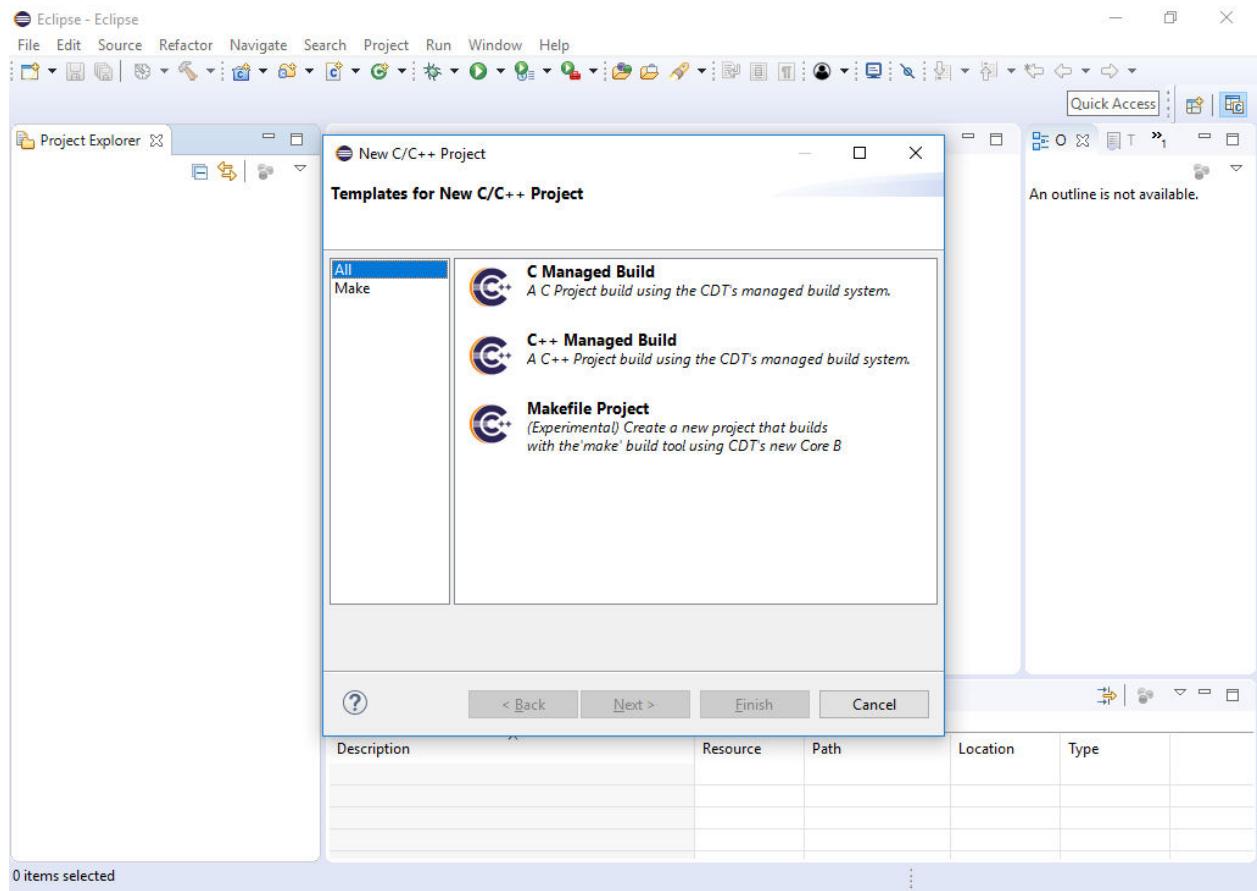
The main *Eclipse* window will be displayed. Take a few minutes to look over the structure of this window.



## Create a New Project

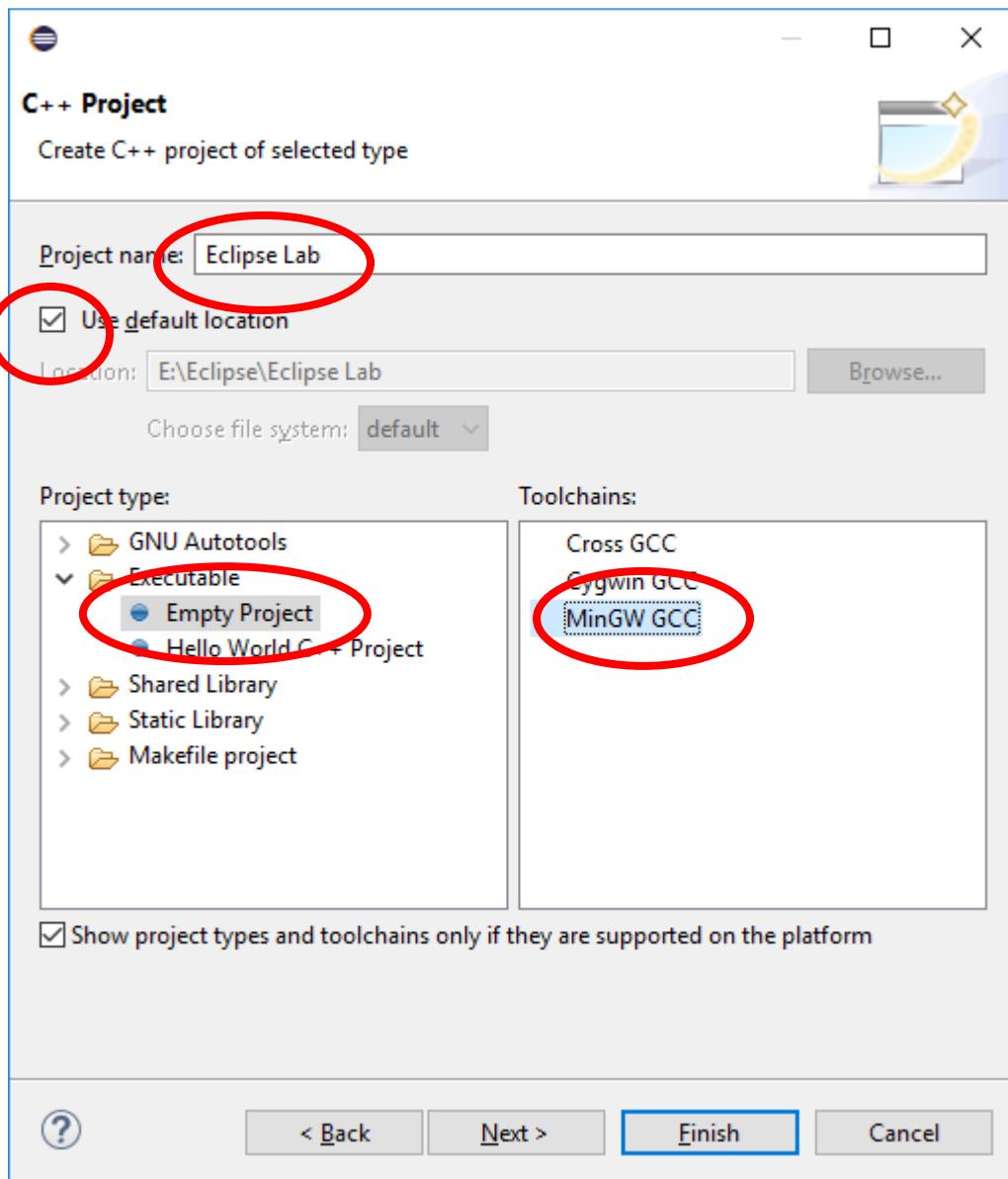
Create a new C++ project within the **Eclipse** workspace. This project will contain C++ program and configuration files. The project will be part of the "workspace" which you created when you started *Eclipse*.

Click on **File** -> **New** -> **C++ Project**



Select **C++ Managed Build**. Click **Next**. Create the new project with name “**Eclipse Lab**” using the default location and options for **Empty Project** and **MinGW GCC**.

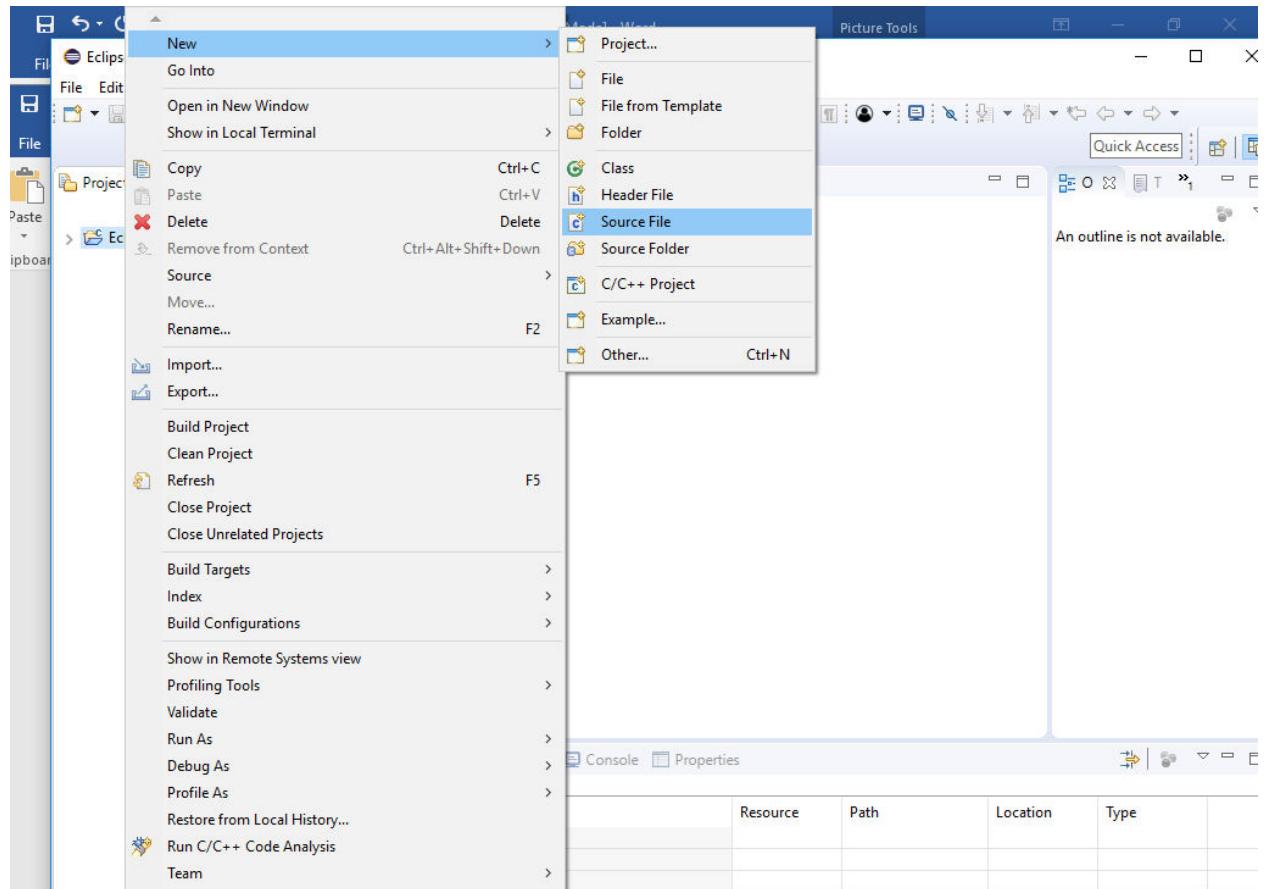
Click **Finish**



## Create a New C++ Source File

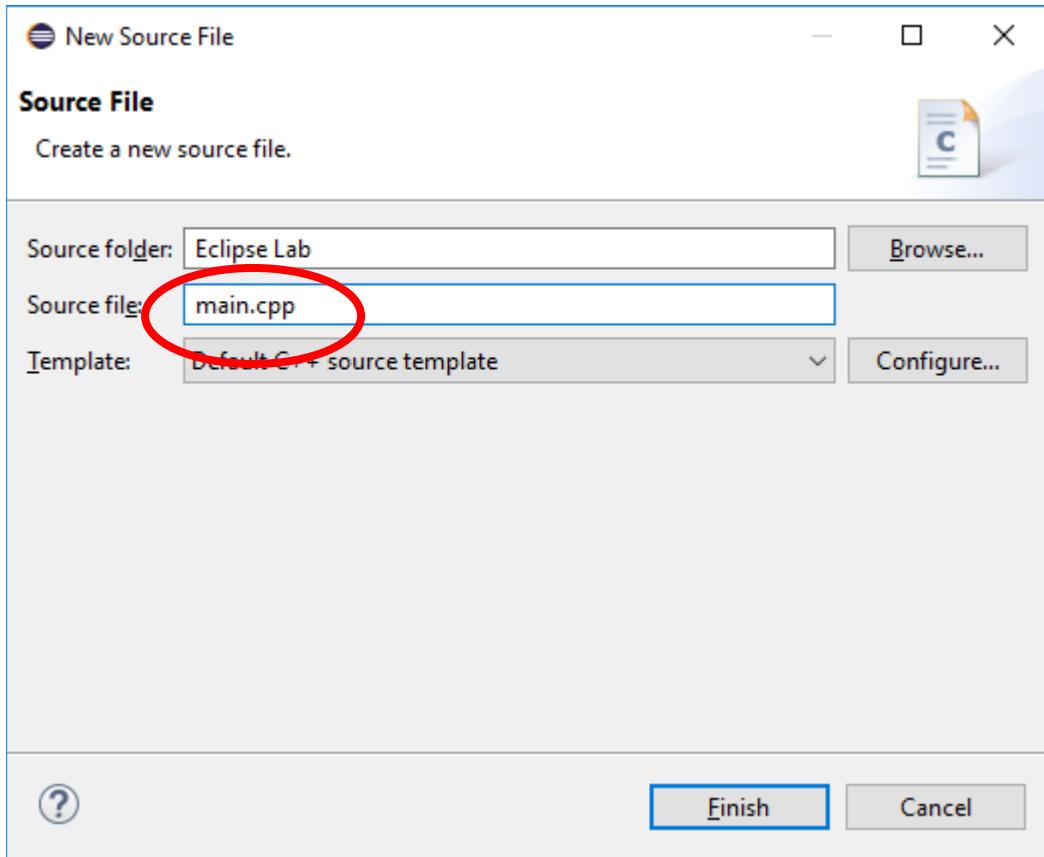
Create a C++ source file within the new project.

Right click on **Eclipse Lab** -> **New** -> **Source File**



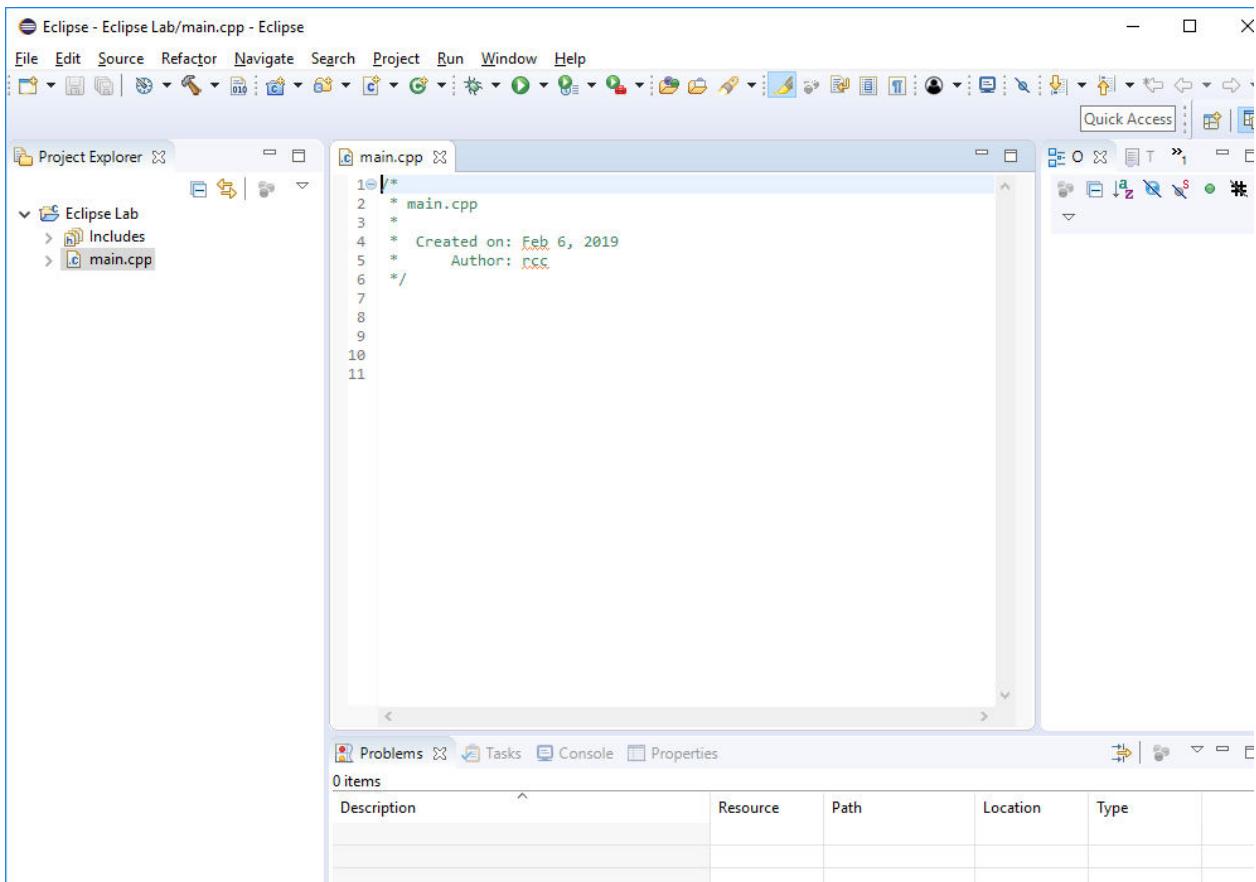
Create the new source file with name “**main.cpp**”.

Click **Finish**



## Edit the C++ Source File

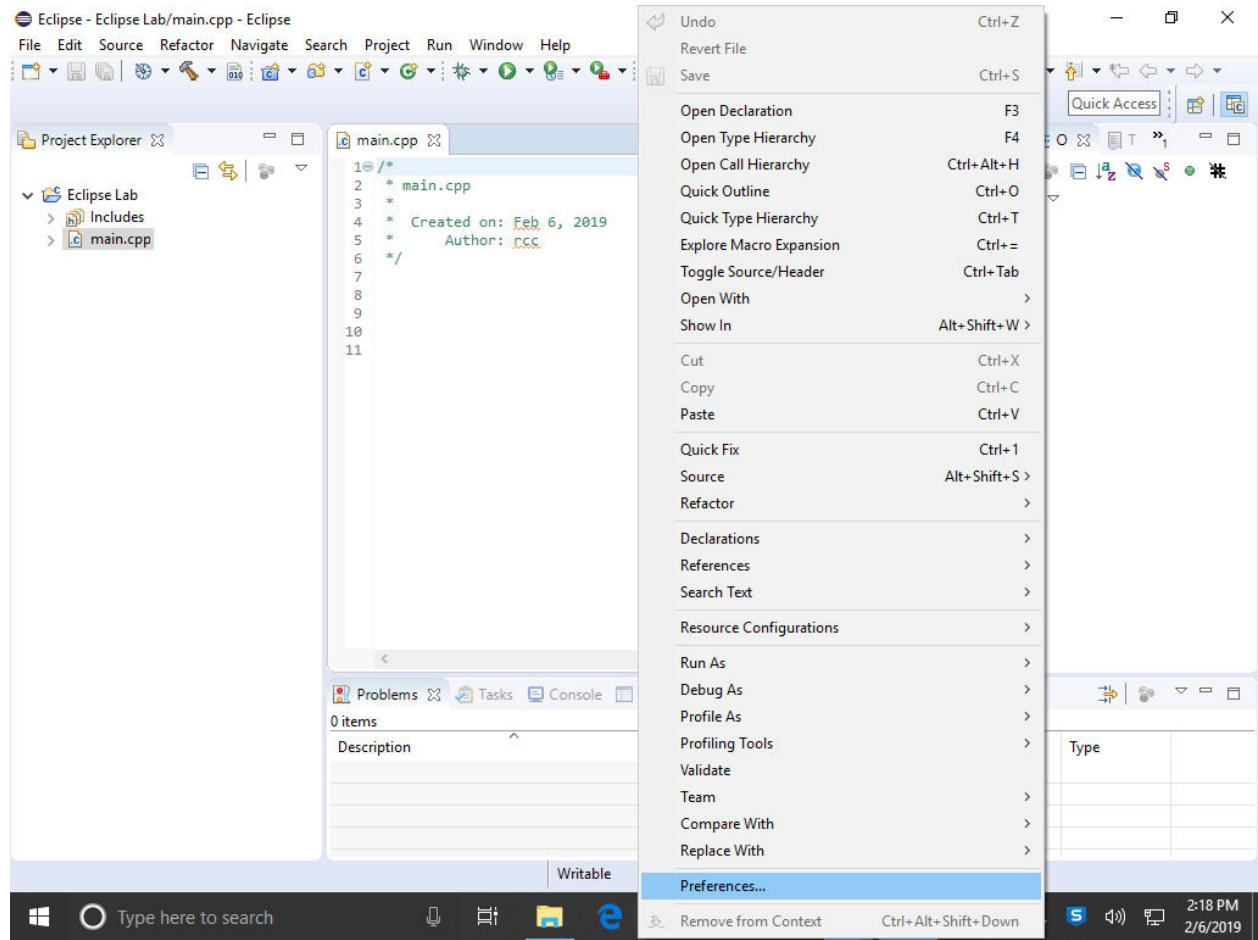
A window will be open for editing the source file “**main.cpp**”.



## Set Editor Preferences

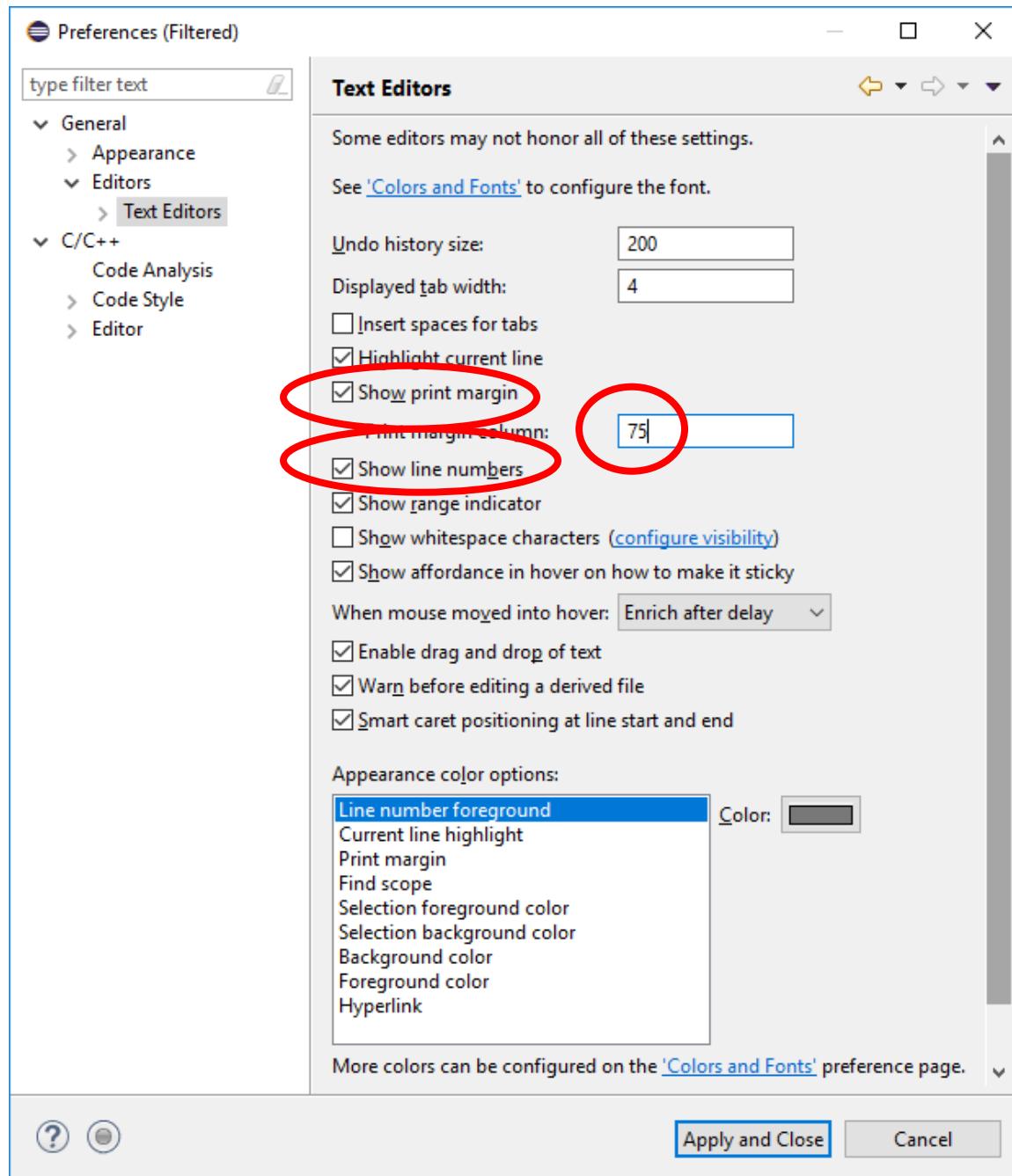
Before proceeding, set the editor preferences for line numbers and print margin.

Right click anywhere within the blank text editor window. Click on **Preferences...**



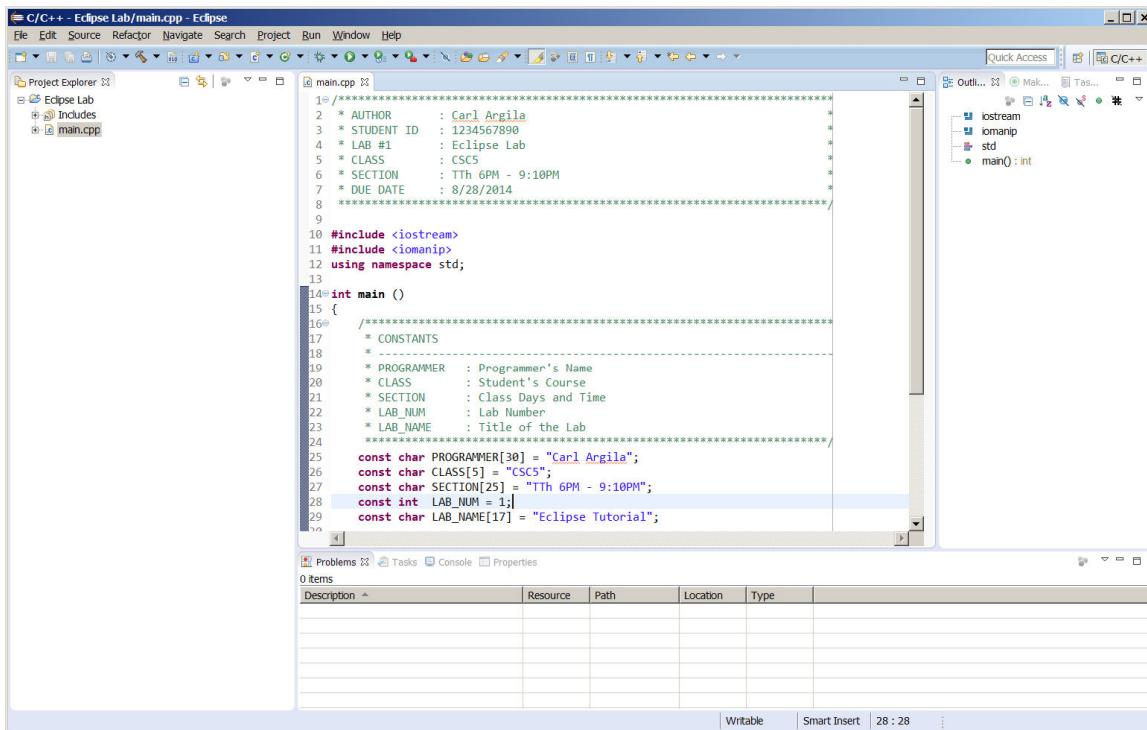
Click on “**Text Editors.**” Set the **print margin** to 75 and select **Show line numbers**

Click **Apply and Close**.



## Enter the C++ Program Code

Enter the C++ program using the code which has been provided. Follow formatting (line spacing, capitalization, etc.) exactly as shown. Use your own name and class information in place of the sample information provided.



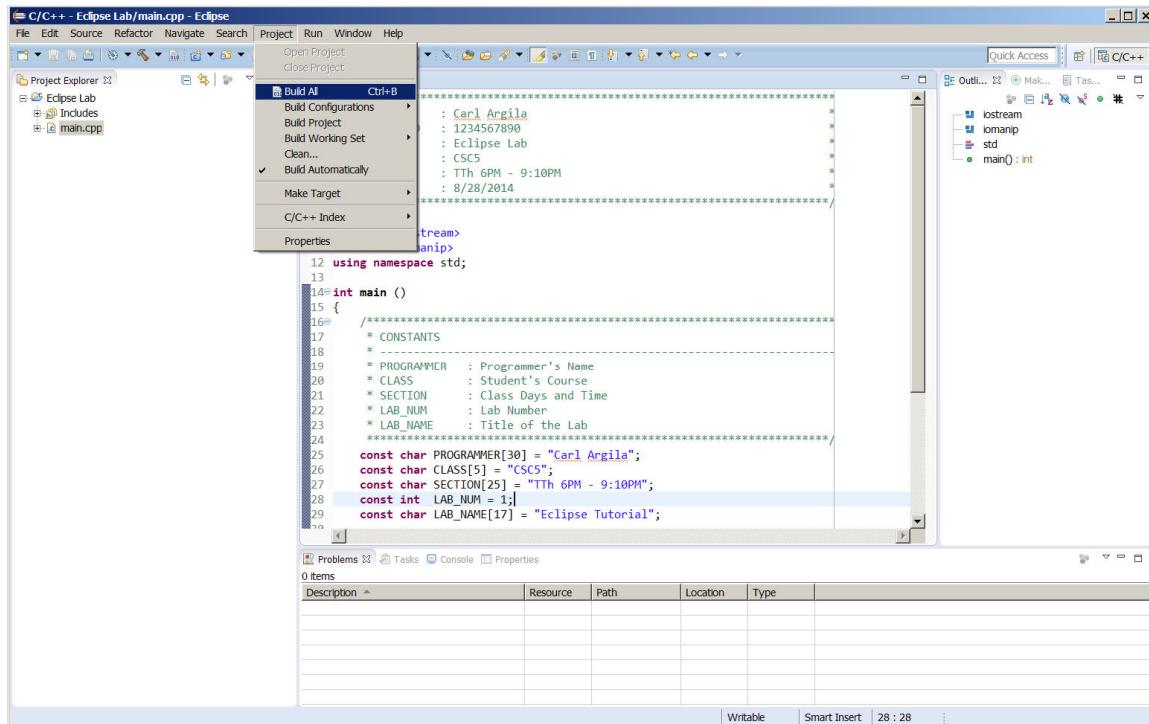
The screenshot shows the Eclipse C/C++ IDE interface with the following details:

- Project Explorer:** Shows the project "Eclipse Lab" with a file named "main.cpp".
- Editor:** Displays the content of "main.cpp". The code includes comments for author, student ID, lab ID, class, section, and due date, and includes directives for `<iostream>` and `<iomanip>`, and the `std` namespace. It defines constants for the programmer's name ("Carl Argila"), class ("CSC5"), section ("TTh 6PM - 9:10PM"), lab number (1), and lab name ("Eclipse Tutorial").
- Outline View:** Shows the structure of the code, including the `iostream`, `iomanip`, and `std` namespaces, and the `main()` function.
- Problems View:** Shows 0 items.

```
1 //*****
2 * AUTHOR      : Carl Argila
3 * STUDENT ID  : 1234567890
4 * LAB #1      : Eclipse Lab
5 * CLASS       : CSC5
6 * SECTION     : TTh 6PM - 9:10PM
7 * DUE DATE    : 8/28/2014
8 ****
9
10 #include <iostream>
11 #include <iomanip>
12 using namespace std;
13
14 int main ()
15 {
16     //*****
17     * CONSTANTS
18     *
19     * PROGRAMMER  : Programmer's Name
20     * CLASS       : Student's Course
21     * SECTION     : Class Days and Time
22     * LAB_NUM     : Lab Number
23     * LAB_NAME    : Title of the Lab
24 ****
25 const char PROGRAMMER[30] = "Carl Argila";
26 const char CLASS[5] = "CSC5";
27 const char SECTION[25] = "TTh 6PM - 9:10PM";
28 const int LAB_NUM = 1;
29 const char LAB_NAME[17] = "Eclipse Tutorial";
```

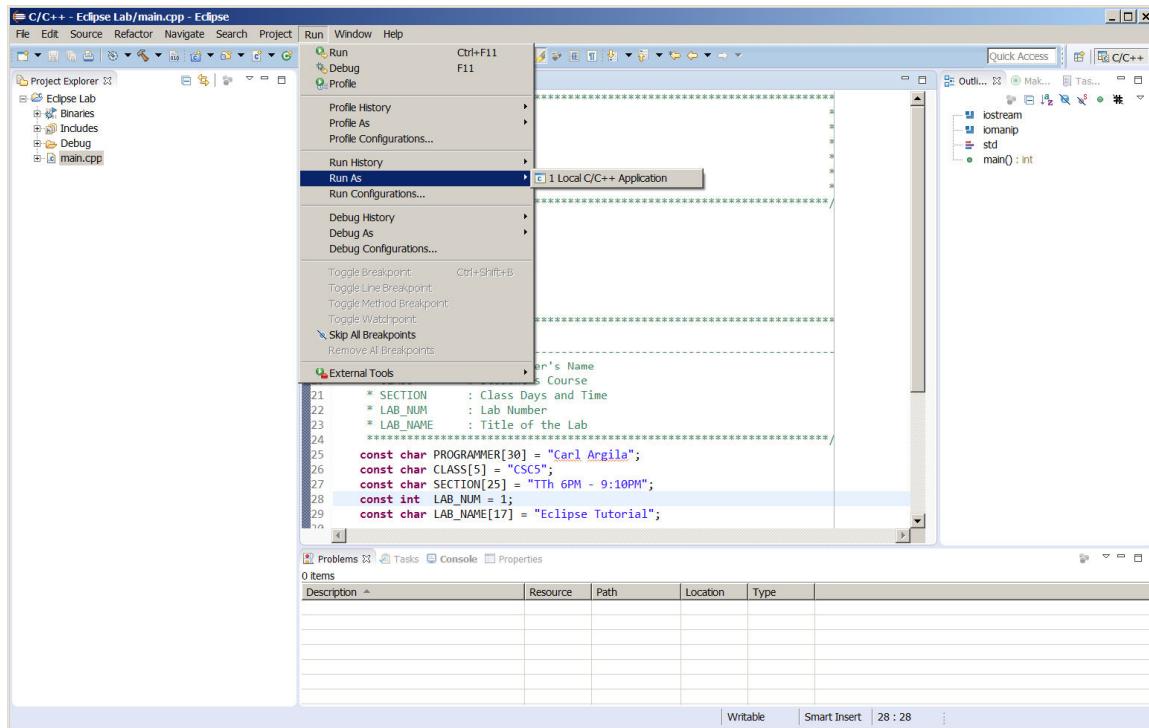
## Compile the C++ Program

Select **Build All** from the **Project** menu.



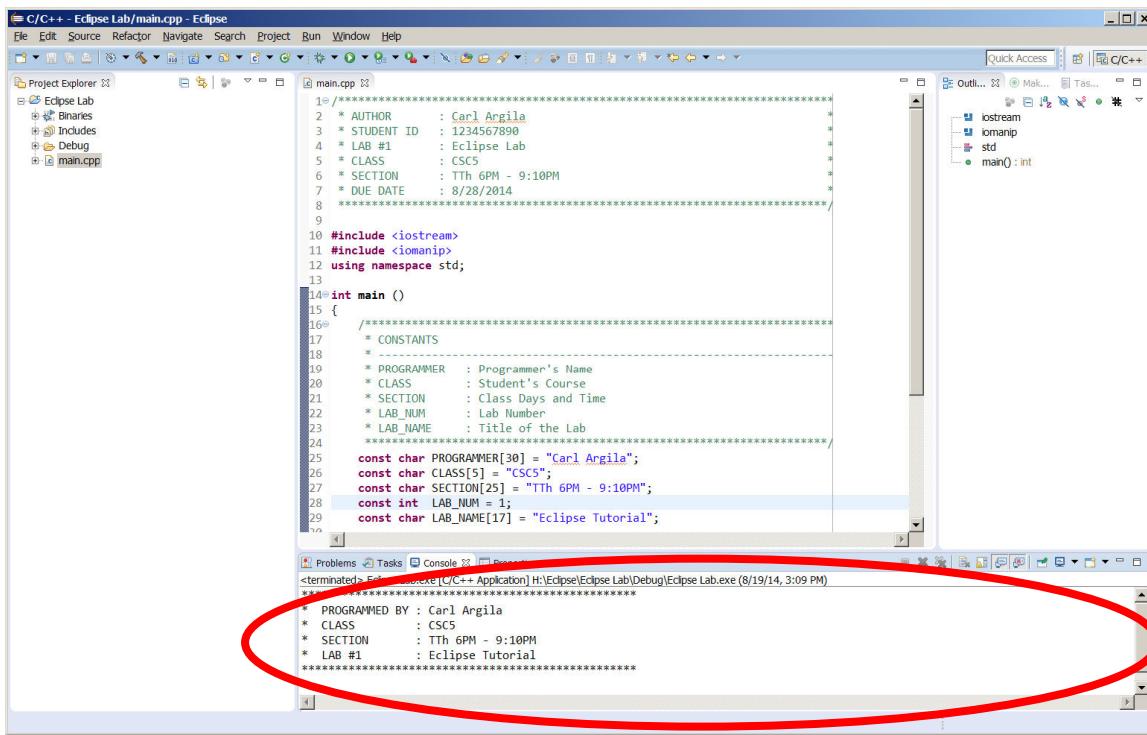
## Execute the C++ Program

Select **Run As** from the **Run** menu.



## Examine the C++ Program Output

Program output will appear in the console window. Verify that this output is correct.



The screenshot shows the Eclipse IDE interface for a C++ project named "Eclipse Lab". The "main.cpp" file is open in the editor, displaying code that includes comments and constants for a program. The "Console" view at the bottom shows the program's output, which is a series of asterisks followed by the program's metadata: "PROGRAMMED BY : Carl Argila", "CLASS : CSC5", "SECTION : TTh 6PM - 9:10PM", and "LAB #1 : Eclipse Tutorial". A large red oval highlights this output text in the console window.

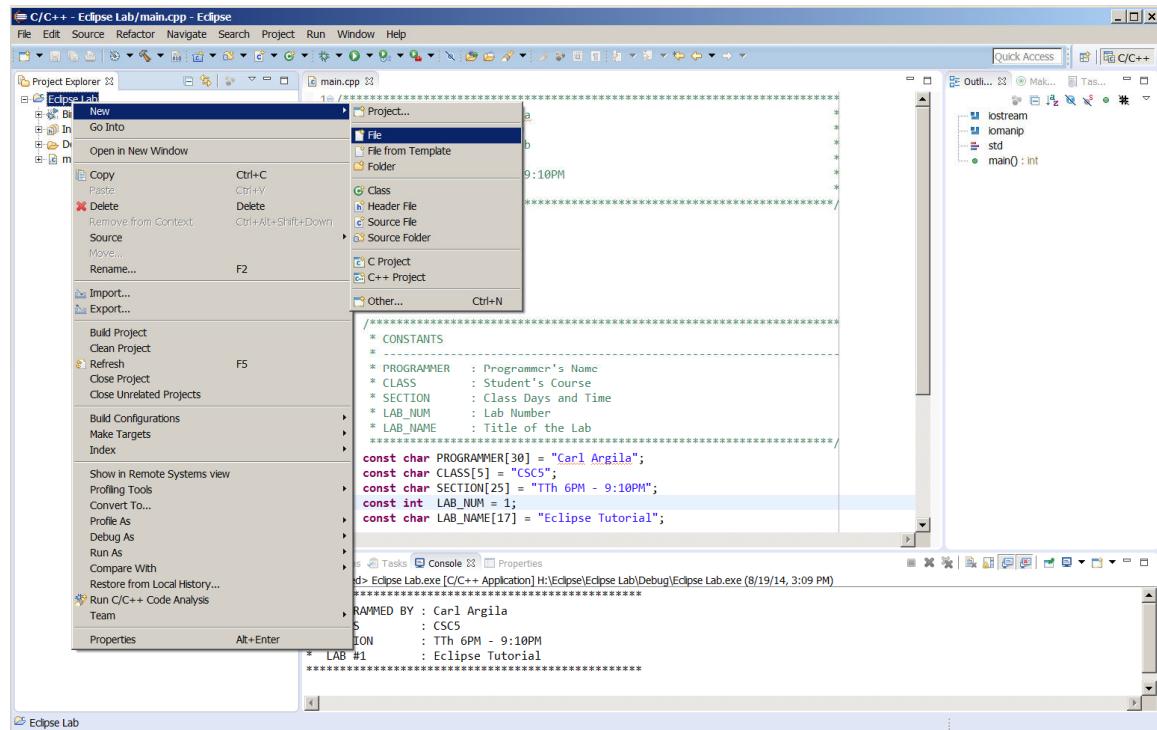
```
1/* ****
2 * AUTHOR      : Carl Argila
3 * STUDENT ID  : 1234567890
4 * LAB #1      : Eclipse Lab
5 * CLASS       : CSC5
6 * SECTION     : TTh 6PM - 9:10PM
7 * DUE DATE    : 8/28/2014
8 *****/
9
10 #include <iostream>
11 #include <iomanip>
12 using namespace std;
13
14 int main ()
15 {
16     /* ****
17     * CONSTANTS
18     * -----
19     * PROGRAMMER  : Programmer's Name
20     * CLASS       : Student's Course
21     * SECTION     : Class Days and Time
22     * LAB_NUM     : Lab Number
23     * LAB_NAME    : Title of the Lab
24     *****/
25     const char PROGRAMMER[30] = "Carl Argila";
26     const char CLASS[5] = "CSC5";
27     const char SECTION[25] = "TTh 6PM - 9:10PM";
28     const int LAB_NUM = 1;
29     const char LAB_NAME[17] = "Eclipse Tutorial";
30
31     cout << "*****" << endl;
32     cout << "* PROGRAMMED BY : " << PROGRAMMER << endl;
33     cout << "* CLASS       : " << CLASS << endl;
34     cout << "* SECTION     : " << SECTION << endl;
35     cout << "* LAB #1      : " << LAB_NAME << endl;
36     cout << "*****" << endl;
37 }
```

Console Output:

```
*****  
* PROGRAMMED BY : Carl Argila  
* CLASS       : CSC5  
* SECTION     : TTh 6PM - 9:10PM  
* LAB #1      : Eclipse Tutorial  
*****
```

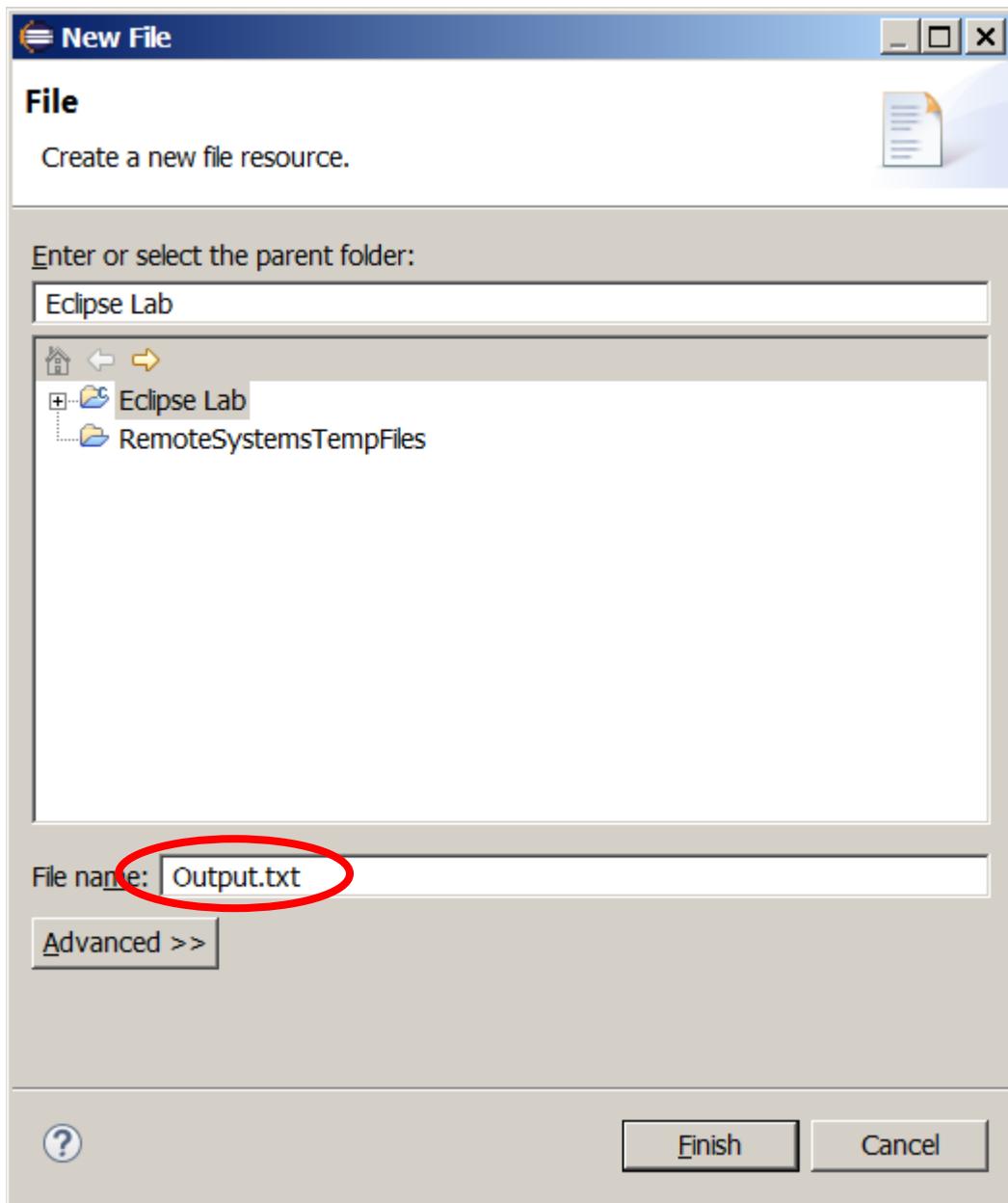
## Create a Text File for Printing

Right click on **Eclipse Lab** -> **New** -> **File**

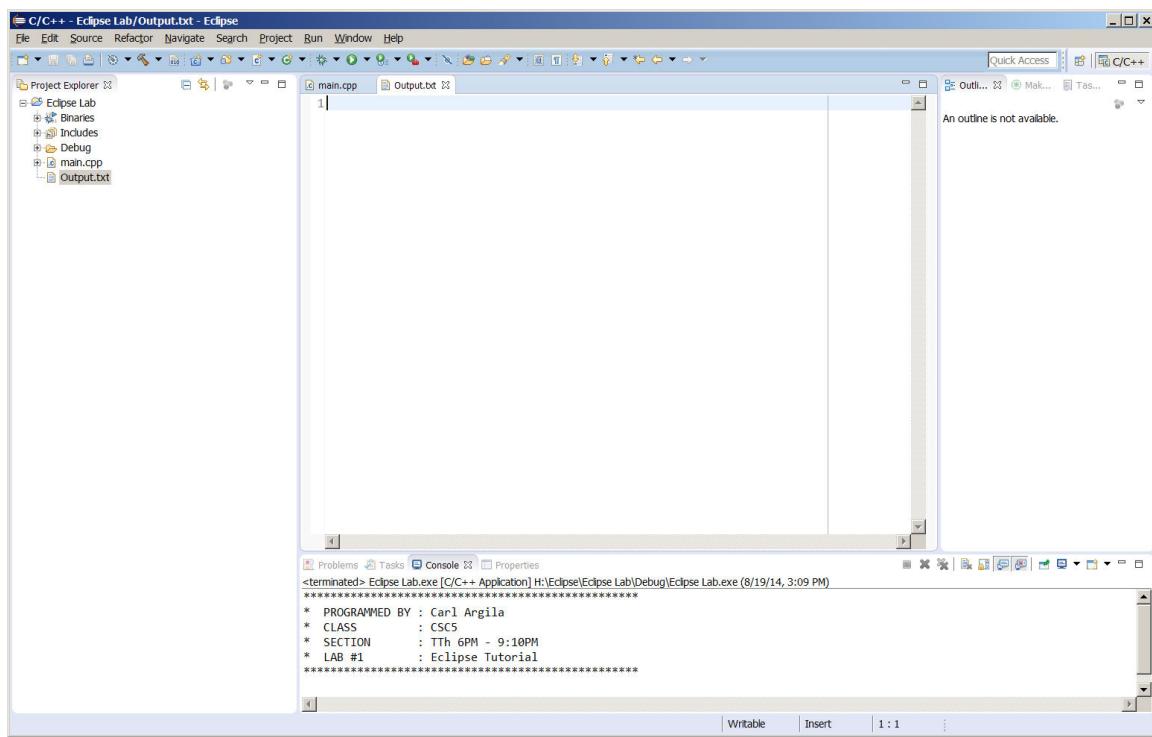


Create the new file with name "**Output.txt**".

Click **Finish**



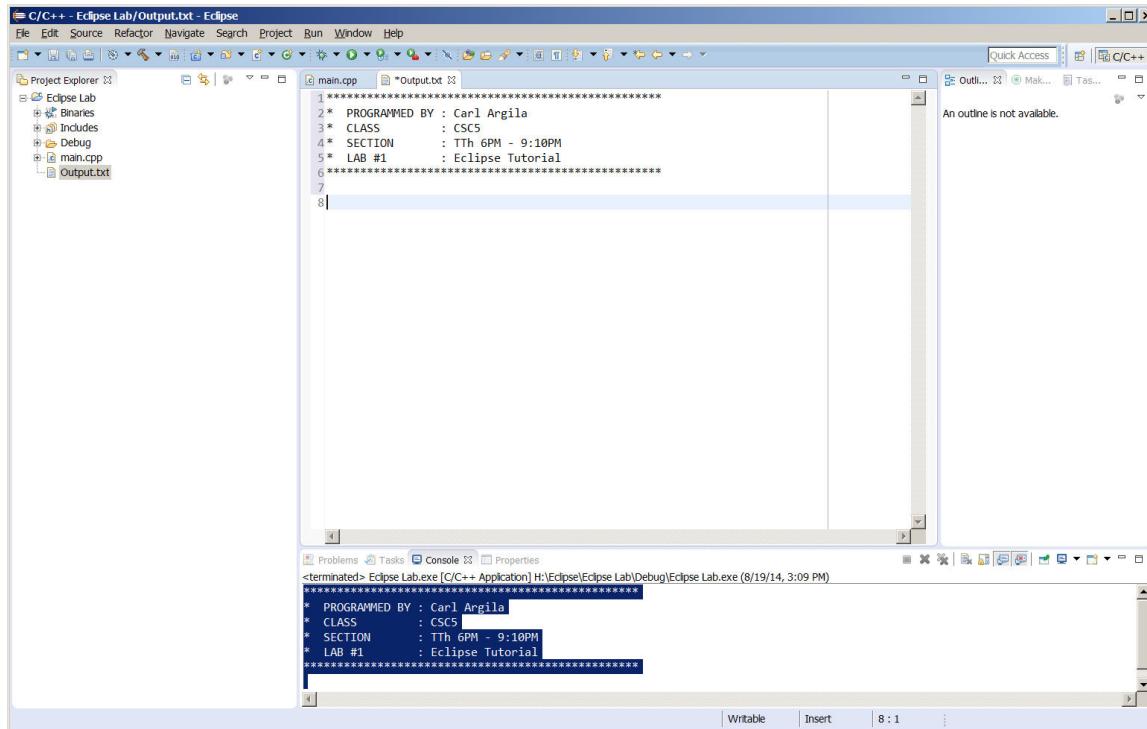
A window will be open for editing the text file “Output.txt”.



## Copy the Console Output to the Text File

Click anywhere within the console window. Type **CTRL-A** to select all of the text in the console window. Type **CTRL-C** to copy the text to the clipboard.

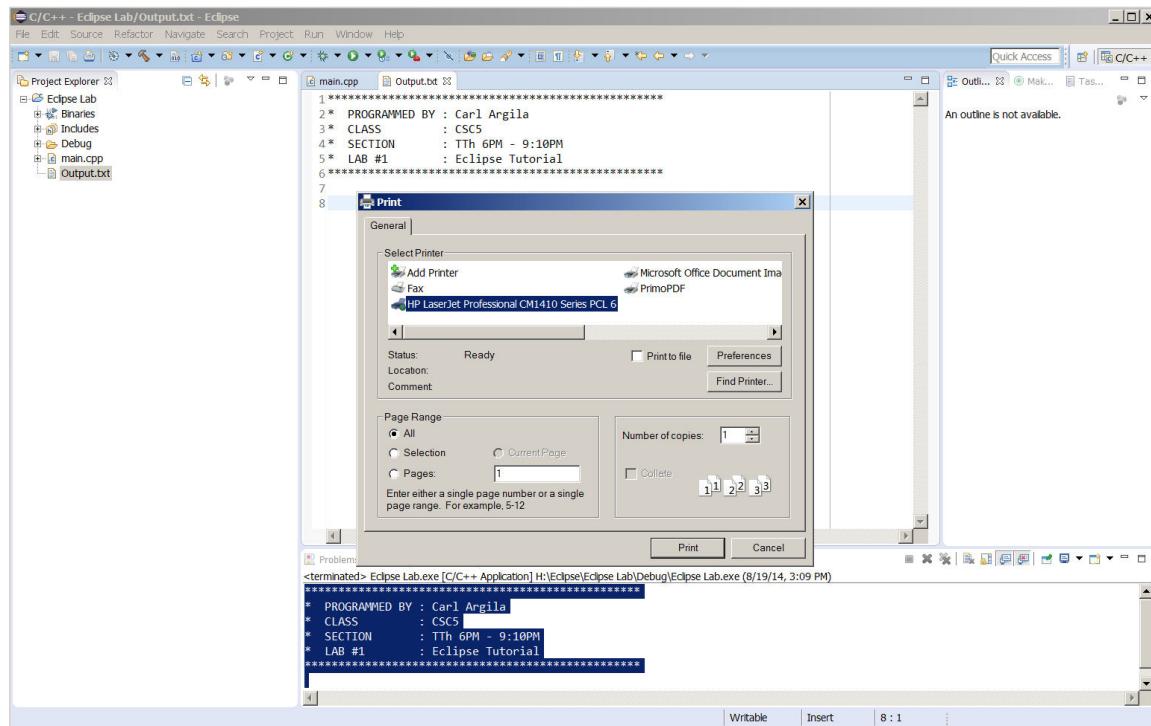
Click anywhere within the **Output.txt** window. Type **CTRL-V** to paste the text into the **Output.txt** window.



## Print the C++ Program and Output

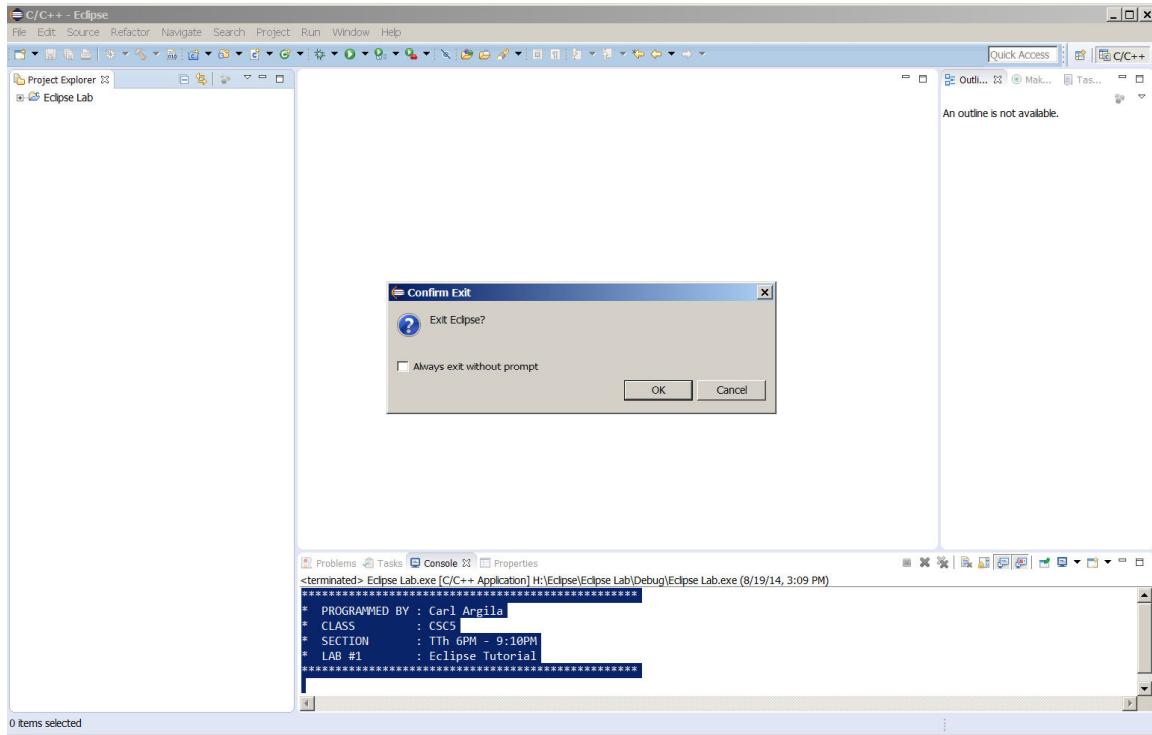
With the **Output.txt** window selected, type **CTRL-P** to print the **Output.txt** file

Repeat this procedure to print the **main.cpp** file.



## Exit Eclipse

Close all windows and exit Eclipse.



C.A.A.  
2014-08-19