

Eclipse Tutorial

- Setting up a Project in Eclipse
- Creating a Source File
- Compiling / Building a Program
- Executing a Program
- Printing the Program & Output

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Eclipse Tutorial

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What is Eclipse

Integrated Development Environment (IDE)

- A Universal Platform for Development Tools
- Open, extensible architecture based on plug-ins
- Open-source
 - see the Eclipse Project at Eclipse.org
- Multi-platform, multi-language, multi-vendor
- Endorsed by major tool vendors
- Reduced Complexity through customizable perspectives and views
- Support for popular features through open standards

Plug-in development environment

C++ development tools

Eclipse Platform

Standard Java2 Virtual Machine

PDE

CDT

Platform

Java VM

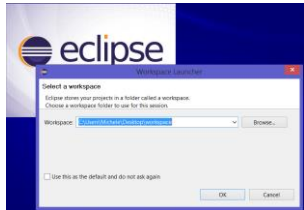
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Creating a workspace

- If you are using eclipse at home and at school
 - Install the same version at home as we use in lab
 - This will prevent compatibility issues
 - Create a workspace on your USB flash drive
 - Name the folder "workspace"
 - (Be sure to keep a backup drive with you as well)



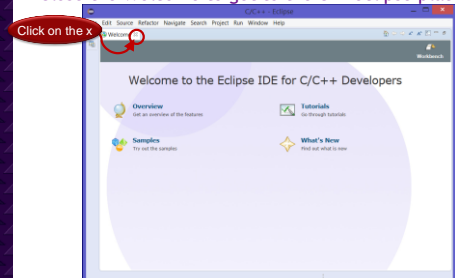
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Tutorial – How to get started

- Watch the tutorial on Blackboard
 - Follow along with it - pause as necessary
- Close the Welcome to get to the c++ eclipse platform



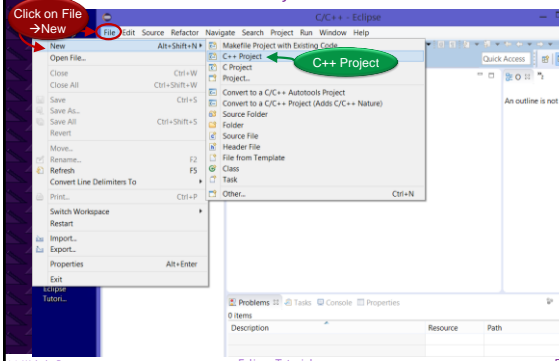
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Creating a Project

- Go to File → New → C++ Project



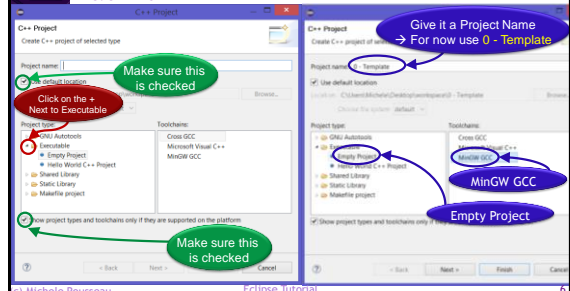
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Creating a Project

- Expand Executable from "Project Types" by clicking on the +
- Select Empty Project from "Project Types"
- Select MinGW GCC from "Toolchain"
- Select a Project Name → for this lab type: Eclipse Lab
- Click Finish



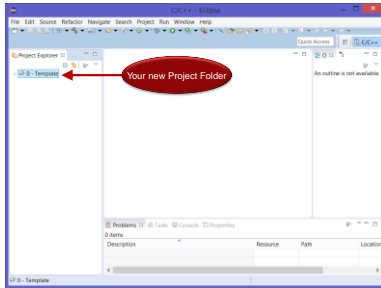
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Creating a Project

- Your project will show up in the project window
- Now we need to Create a Source File



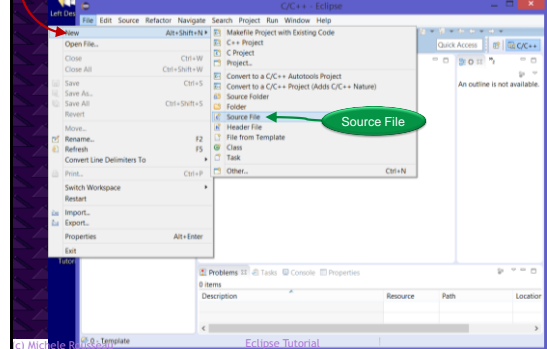
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Creating a C++ Source File

File → New → Go to File → New → Source File



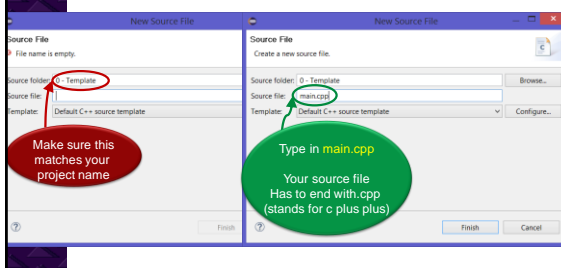
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Creating a source file

- Enter main.cpp in the name
- → finish

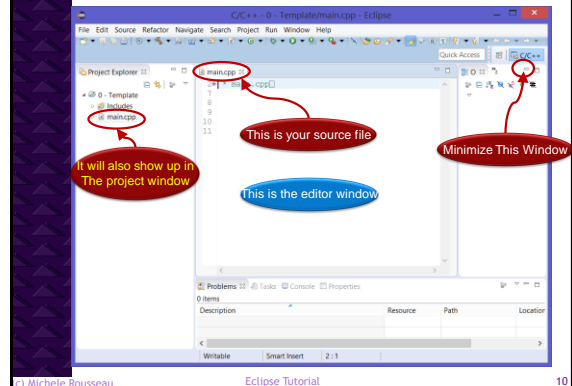


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Source File



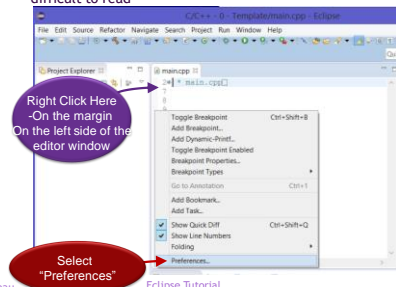
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Setting up Preference

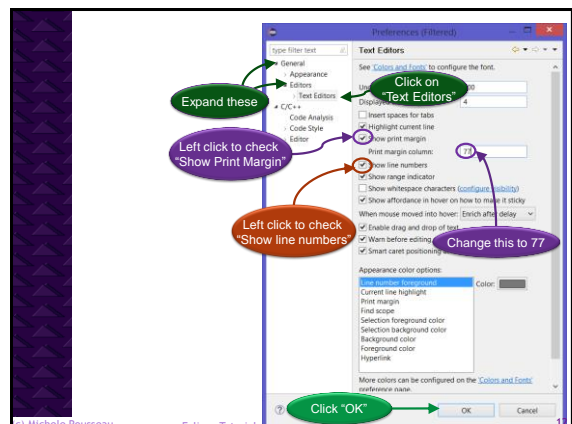
- Set up line numbers
 - Line number need to be displayed for all source code and output
- Set up the Print Margin
 - Any text over the print margin will word wrap when printed - this is difficult to read



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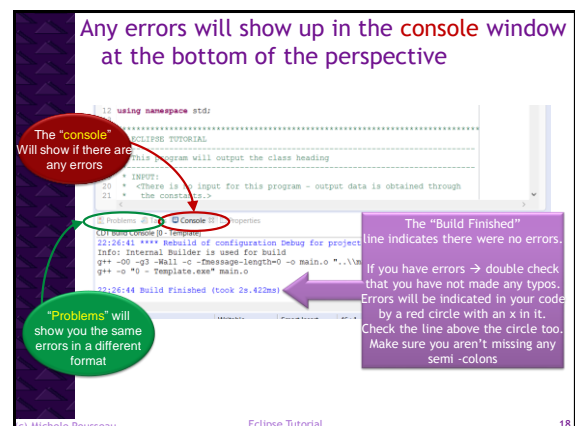
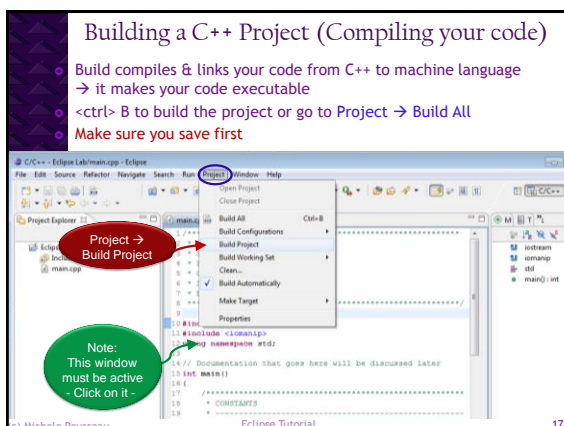
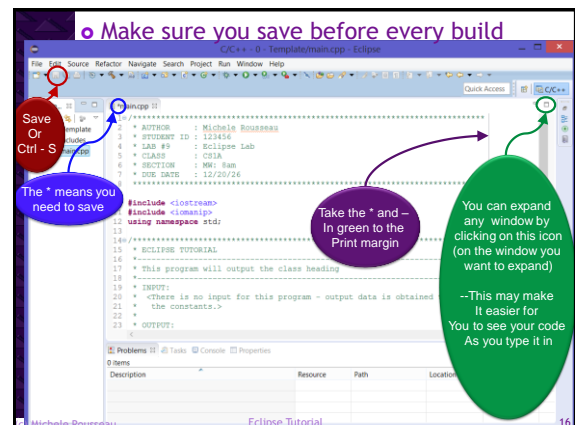
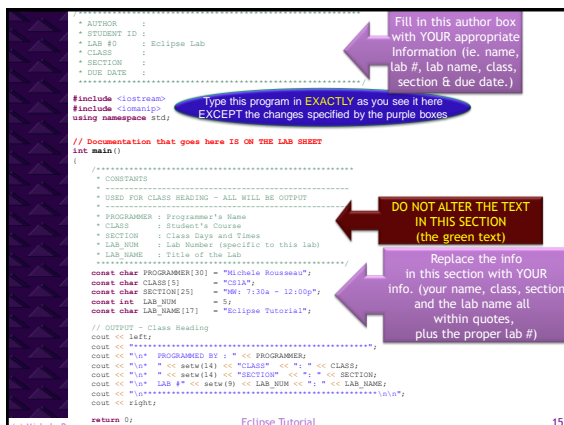
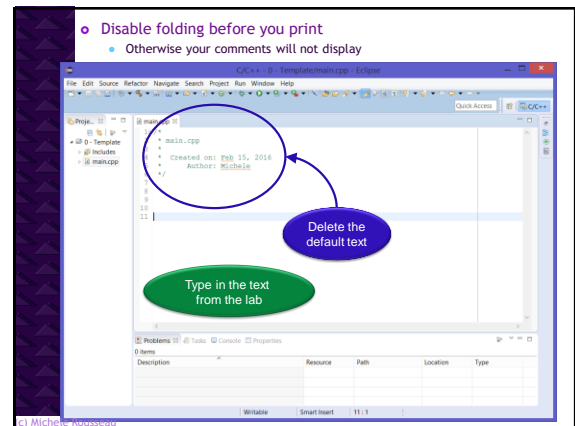
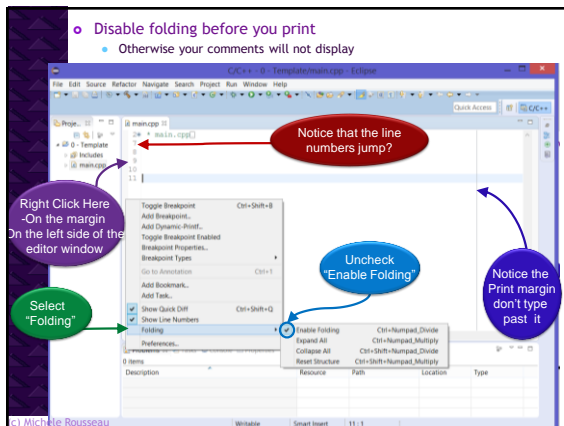
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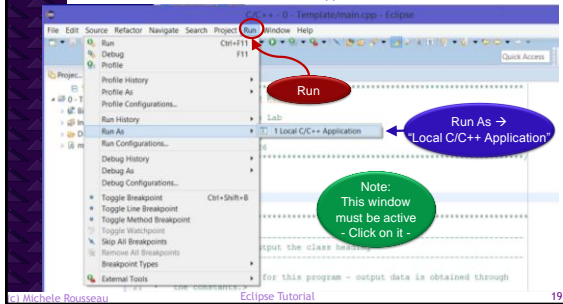
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Running a C++ Application

- If code has compiled properly (You got the build complete message)
- You are ready to build
- First → Click on the source file window
 - In this case main.cpp
- Click on Run → Run as → Local C/C++ Application



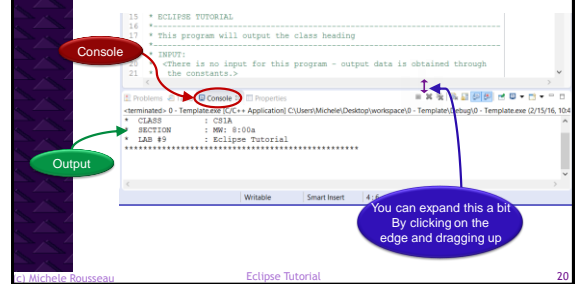
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Run Program

- If you have compiler errors
 - you will get a "launch failed no binaries"
 - Go back and fix your errors
- Otherwise the results will display in the console window



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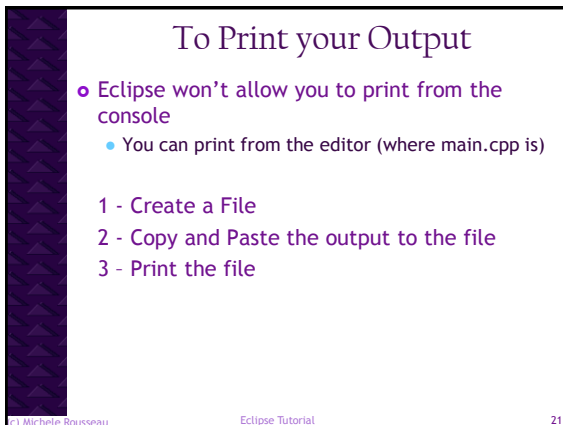
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To Print your Output

- Eclipse won't allow you to print from the console
 - You can print from the editor (where main.cpp is)

- 1 - Create a File
- 2 - Copy and Paste the output to the file
- 3 - Print the file

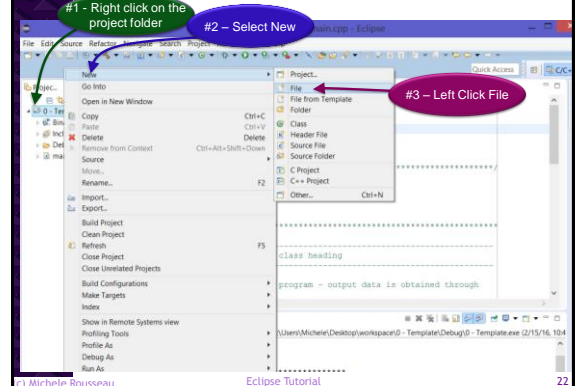


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1. Create a File

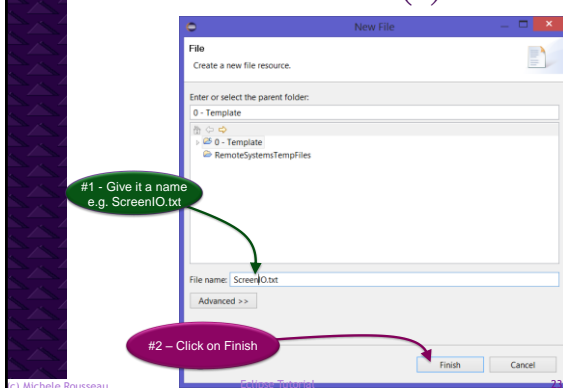


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1. Create a File (2)

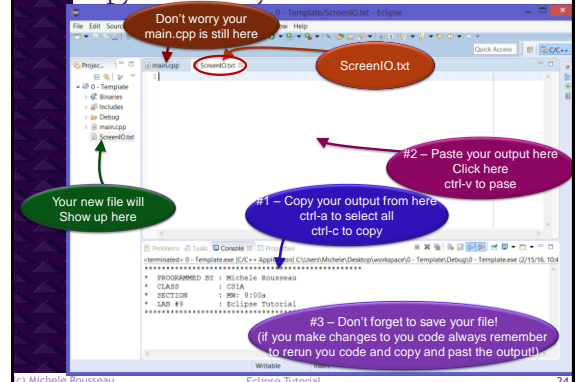


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Copy and Paste your Screen IO into the File



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Print and Exit

- **Print**
 - Select File -> Print
- **Click on the tab for main.cpp**
 - Select File -> Print
- **To Exit from Eclipse**
 - Select File -> Exit

#1 - Click on File

#2 - Click on Print

#3 - Repeat the process for main.cpp

#4 - Click on File -> Exit

The screenshot shows the Eclipse IDE interface. The 'File' menu is open, displaying options like 'New', 'Open...', 'Close', 'Save', 'Print...', and 'Exit'. The 'Print...' option is highlighted with a green arrow, and the 'Exit' option is highlighted with a blue arrow. The background shows a C++ project with a main.cpp file open in the editor.