Using Eclipse CDT for C/C++ Development

- Make sure you have the CDT plugin installed. You can check it by going to the Help → Software Updates → Manage Configuration.
- If you do not have it, then you can use Help → Software Updates → Find and Install to find and install the CDT plugin.

Creating a new C Project

- Click on File → New → Managed Make C Project. With this option, Eclipse creates and manages the Makefile for you!
- Choose the name of the project. The project contents can be left as default. In that case, Eclipse creates a folder under your default workspace folder with the same name as the project. Select Finish to finish creating a project.
- ➤ To create a new header or source file, right click on the project pane (on the left) and choose the appropriate option.

Handy Tips

- Content Assist. Use the keys Ctrl-Space to ask for help with function names, arguments and other topical content assistance.
- Word Completion. Use the keys Alt-/ to complete words after you type in the first few characters. Very useful to avoid having to type long variable or function names.

Building, Running and Debugging a New Project

- ▶ Recommend turn off Project → Build Automatically option.
- Click on Run → Debug.... Then a new window pops up that allows you create and manage run/debug configurations. Click on C/C++ Local Application and then click on New. Then select the executable to run from the project. You can choose the Search Project... option to see a list of executables to choose from.
- ► Then set command line arguments in the Arguments tab, set the Debugger to be the GDB Debugger. Then click on Apply. Now you are ready to run or debug the code. Select Debug to next start up the debugger.
- ► To run without a debugger, click on Run → Run... and then choose the run/debug configuration that you created previously.

Importing an Existing Project into Eclipse

Suppose we have an existing project that has a proper Makefile (one that has an all rule that builds the whole project and a clean rule that removes all object files and executables) in a folder somewhere. Then you can import this into Eclipse as follows.

- ► Click on File → New → Standard Make C Project.
- Choose the name of the project. Uncheck the box labeled Use default under Project Contents tab and then specify the folder where the project is contained. Select Finish to finish creating a project. Viola! all the files from that project are now in Eclipse.
- ► To run/debug, you need to create configurations as discussed on the previous slide.