# Debugging a project

The debugger lets you control the execution of your program by setting breakpoints, suspending executed programs, stepping through your code, and examining the contents of variables.

To debug a project:

1. Click **Run > Debug Configurations...**.  
   The Debug Configurations dialog opens.
2. Double-click **C/C++ Application**.
3. In the **Name** field, type **Hello World**.

You can now select this debug launch configuration by name the next time that you debug this project.

1. In the **Project** box, type or choose your project, e.g. **HelloWorld**.  
   Your executable should be selected under "C/C++ Application."  
   If not, the **Search Project** button should find the executable in the project.  
   * If you see the error "[Debugger]: No debugger available", select the Debugger tab and choose a valid debugger for your platform (e.g. gdb/mi).
2. Click **Debug**.

You will be prompted to switch to the Debug Perspective. Click **Yes**You will now see the debug perspective with the hello.exe application window open. The C/C++ editor repositions in the perspective.

* + If you see an error in the editor "Can't find source file" you can use the buttons provided to point to your source file, e.g. "Locate File."

1. In the left margin of the main.cpp window, double-click to set a breakpoint on:  
    cout << "You just entered"  
   You'll see an icon there indicating the breakpoint is set.
2. Click **Run > Resume**.  
   Or, you can use the **Resume** button (green arrow) on the toolbar *of the Debug View*
3. When prompted, in the Console view, type a value other than 'm', and hit Enter/Return.  
   The breakpoint will be hit.
4. In the **Variables** view, verify that the variable is not 'm'.
5. Click **Run > Resume**.
6. When prompted, again type a value other than 'm' in the Console view, and press Enter/Return.

The breakpoint will be hit.

1. In the **Variables** view, verify that the variable is not 'm'.
2. In the **Variables** view, right-click the input variable, and select **Change Value...** and type **'m'** *between the single quotes* and hit **OK**.
3. Click **Run > Resume**.

The output in the hello.exe application window is:  
 "You just entered m, you need to enter m to exit."

1. The application terminates and the debug session ends. The debug perspective remains open.

To learn more about debugging, see the related debug conceptual topics.

[**Back: Building a project**](http://docs.google.com/cdt_w_build.htm)



[Debug overview](http://docs.google.com/concepts/cdt_c_over_dbg.htm)

[Debug information](http://docs.google.com/concepts/cdt_c_dbg_info.htm)



[Debugging](http://docs.google.com/tasks/cdt_o_debug.htm)



[Debug view](http://docs.google.com/reference/cdt_u_dbg_view.htm)

[Debug launch controls](http://docs.google.com/reference/cdt_u_dbg_view.htm)

