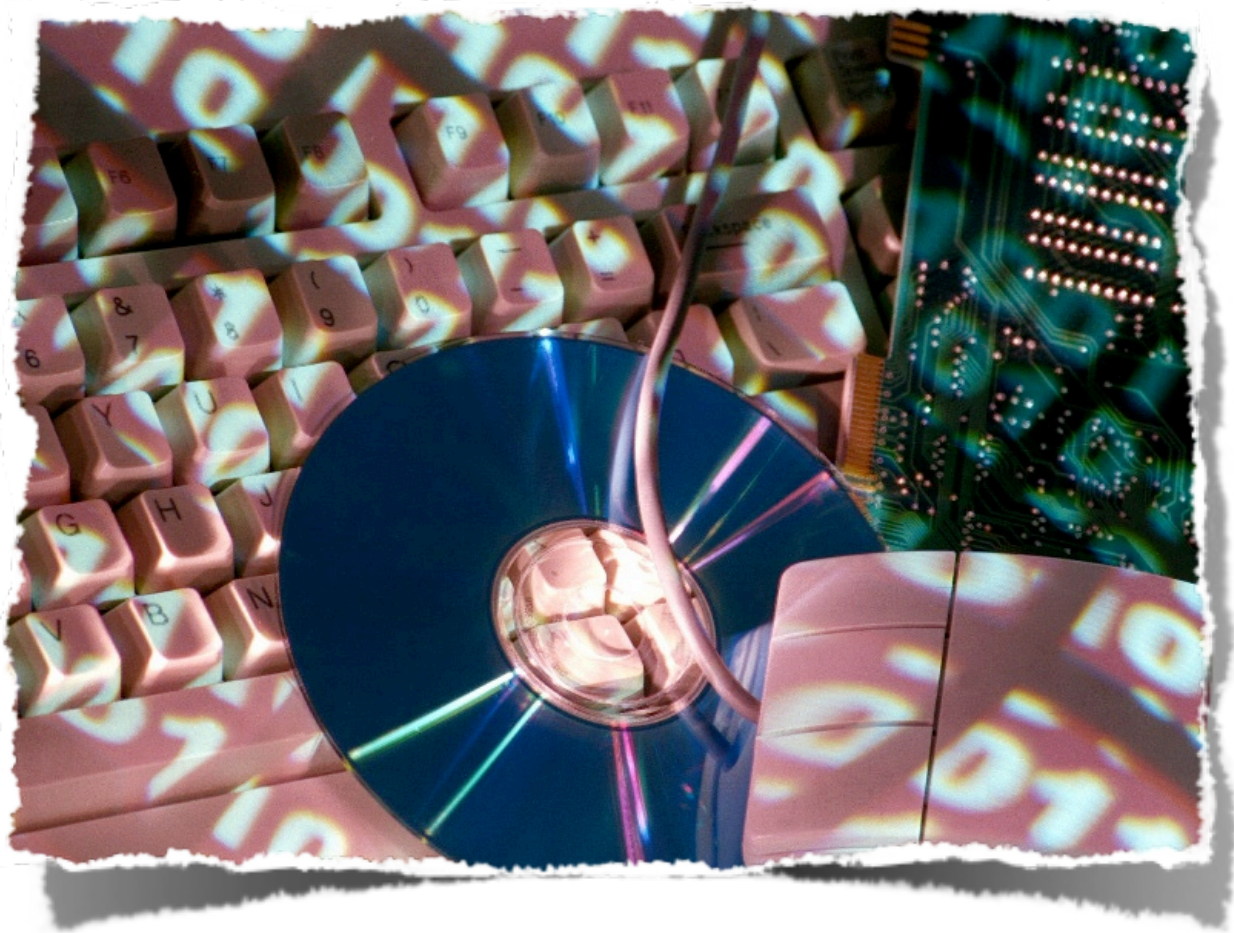

Setting Up Your Development Environment



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Computer Science Online!

{ Microsoft Windows Version }



SETTING UP YOUR DEVELOPMENT ENVIRONMENT

Microsoft Windows Operating System Version

Here are the key steps:

- Download and Install Visual Studio 2010 Express
- Create a Visual Studio C++ Project
- Create, Build and Run a C++ Program

Download and Install Microsoft Visual Studio 2010 Express

You can download a **free** installer for *Microsoft Visual Studio 2010 Express* at:

<http://www.microsoft.com/express/Downloads/>

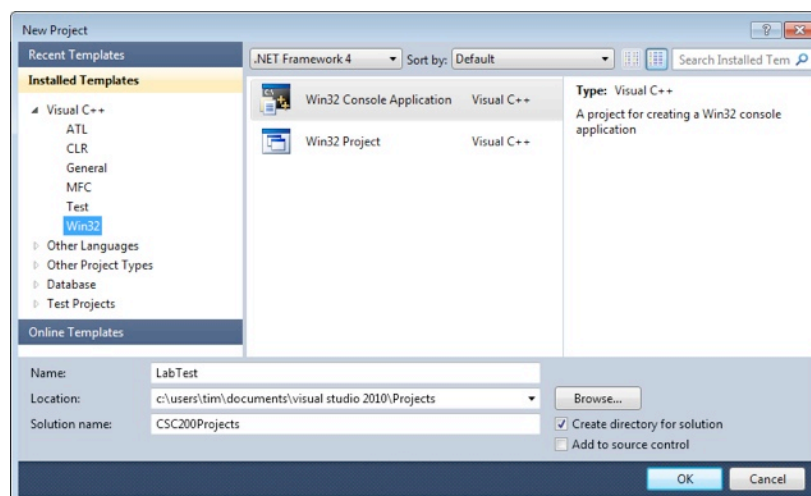
Be sure to download the **Visual C++** or complete (**All**) version.

Once the installer is downloaded, launch it and follow the on-screen instructions to install *Visual Studio 2010*.

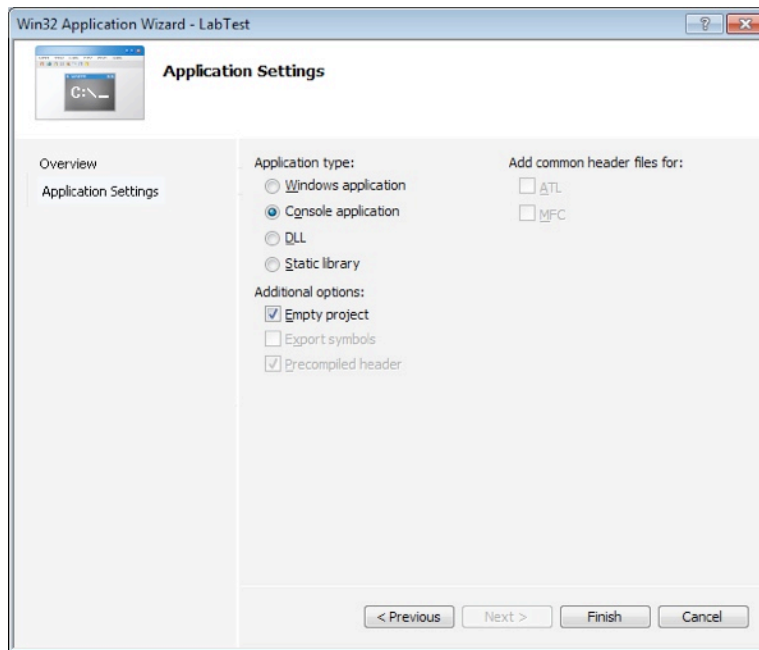
If you already own a version of Visual Studio, you can skip to the section on creating, building and running a C++ program.

Create a Visual Studio C++ Project

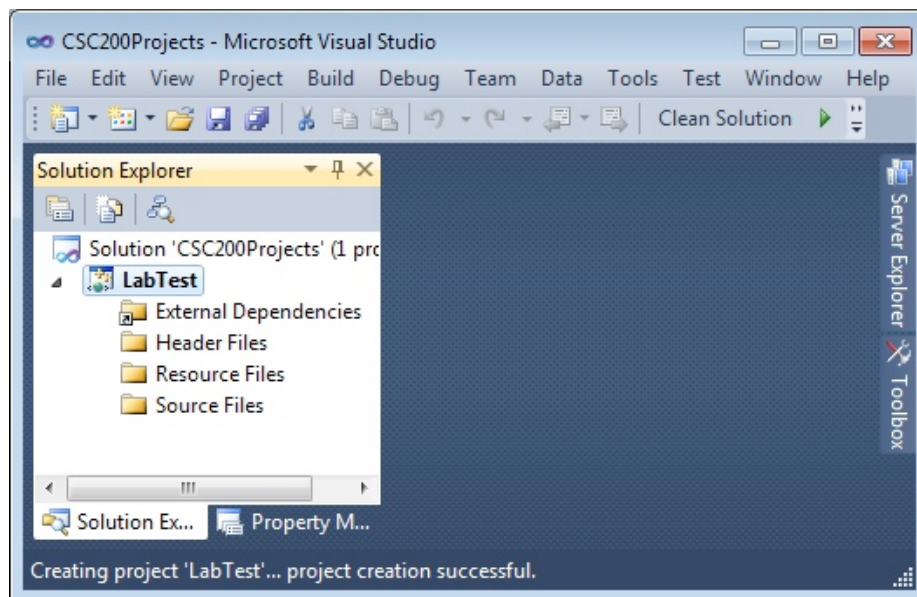
- Launch *Visual Studio*.
- Select **File >> New >> Project ...**
- In the **New Project Dialog**, select **Visual C++ >> Win32** and **Win32 Console Application**
- For **Name:** , enter a name for your project, for example LabTest.
- For **Location:** , select a folder on your hard disk to store your projects.
- For **Solution name:** , enter a name for **CSC200Projects**. A **solution** is a group of related projects. You can create a solution for each project or you can keep all of your CSC200 projects in the same solution.



- When you click **OK**, the **Win32 Application Wizard** is launched.
- Click **Next** on the first screen of the wizard.
- On the **Application Settings** screen, select **Console Application** and check **Empty project**.



- Click **Finish** and *Visual Studio* creates an empty project named **LabTest** for you.

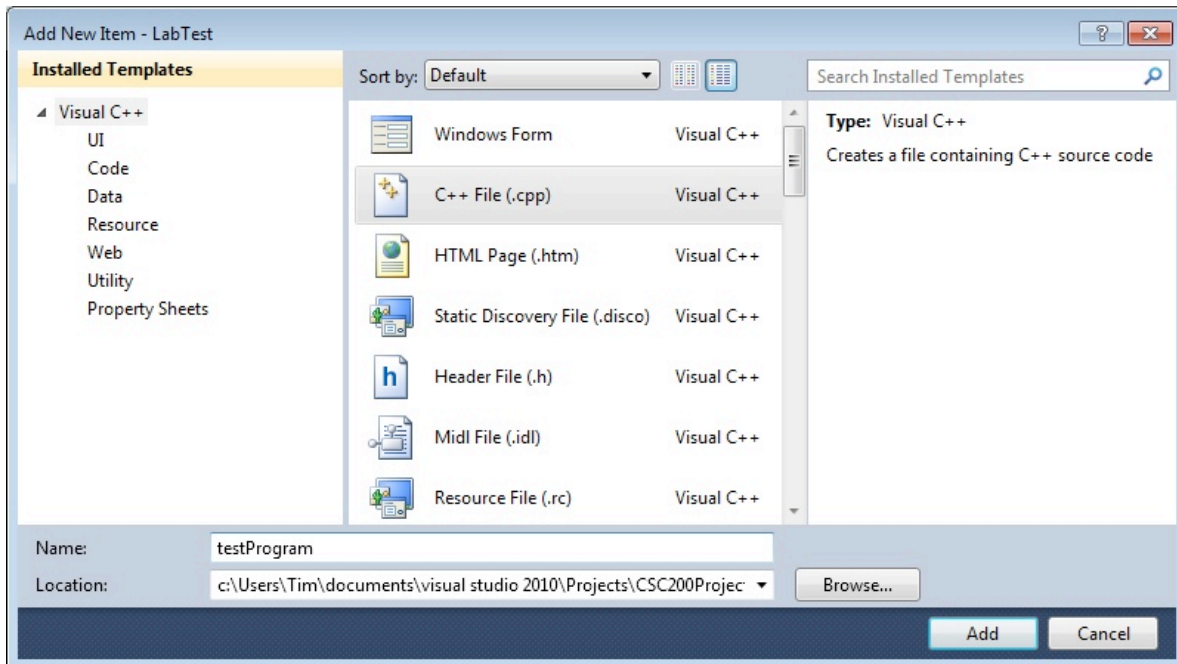


This project holds all of the files that are part of your project. The most important file types for our projects will be source code files (.cpp), header files (.h) and executable files (.exe). Each program or application you write, should have it's own project (even though all of the projects can be grouped into a single "solution").

Create, Build and Run a C++ Program

To create our first program, we need to create a source code file to hold our code. There are a number of ways to do this.

- Right-click on the project name, **LabTest**, or **Source Files** folder and select [Add >> New item ...](#) from the pop-up menu.
- In the [Add New Item](#) dialog, select the C++ File (.cpp) template as a type of file type. Enter a name for your file, for example **testProgram**.



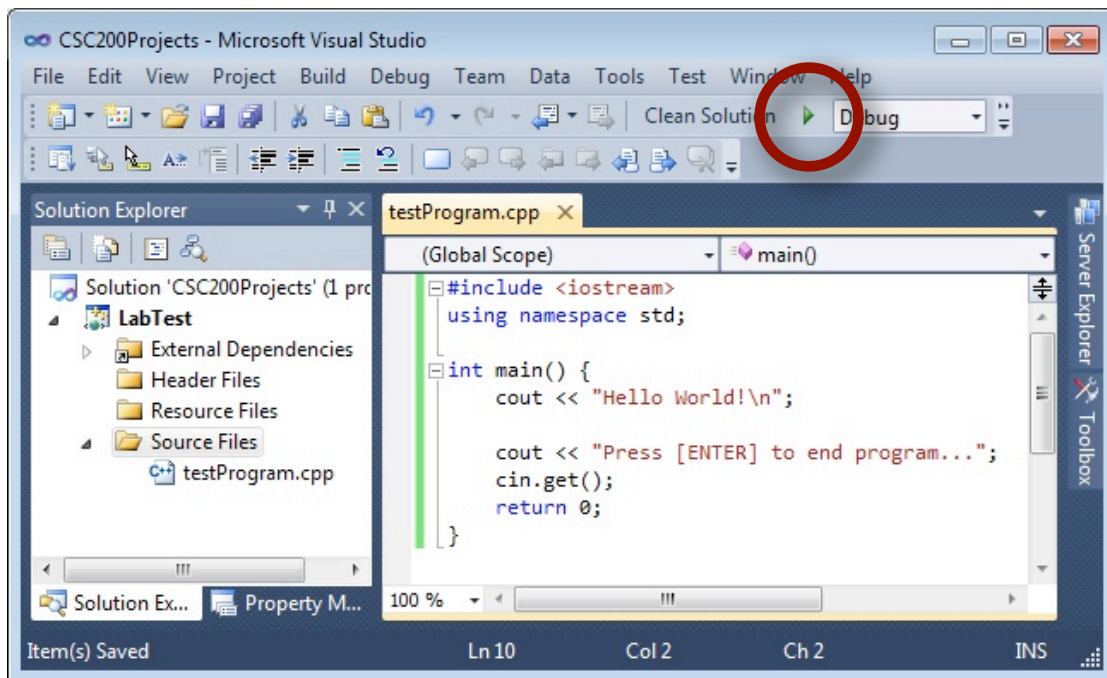
Once you click [Add](#), *Visual Studio* creates the file and adds it to your project.

Enter some code for your program. You don't need to understand it at this time, but this will get you started quickly.

```
#include <iostream>
using namespace std;
```

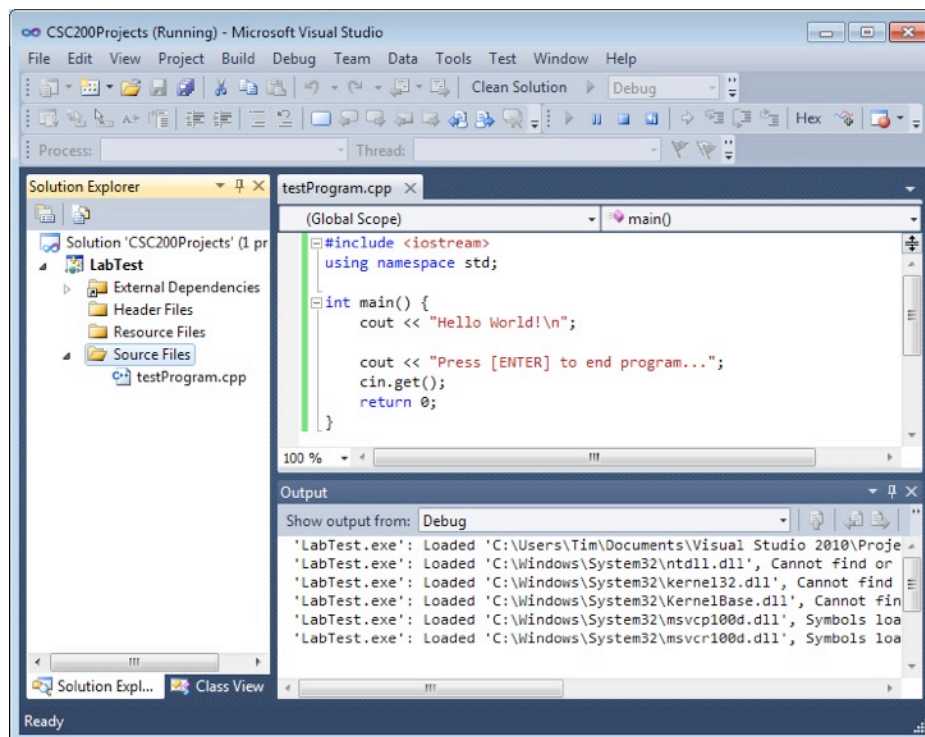
```
int main() {
    cout << "Hello World!\n";

    cout << "Press [ENTER] to end program...";
    cin.get();
    return 0;
}
```

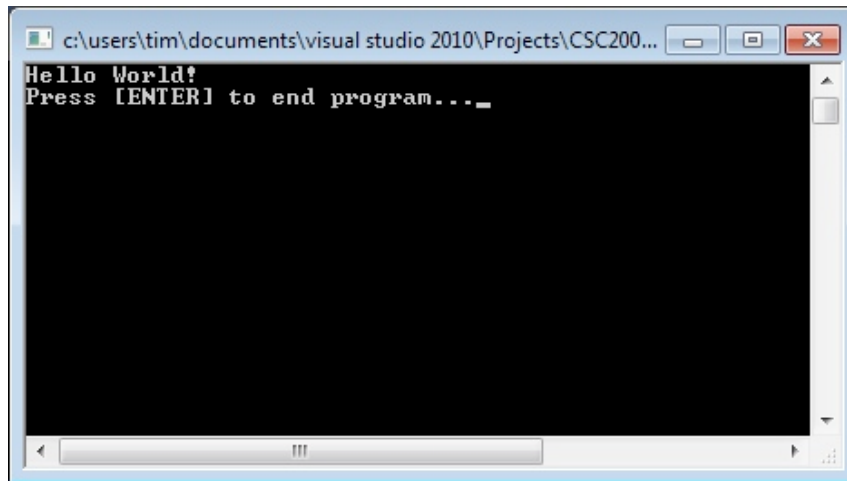



- To execute your program, click the green triangle next to the word **Debug**. The program will compile and execute.

While the program is compiling you should see an output window open in Visual Studio that gives you feedback from the compiling process. If there are syntax or linking errors in your program those will be displayed here.



If there are no errors, your program will launch and you'll see the text displayed in a console window like the one below:



If the [Solution Explorer](#) window is not visible, you can display it by selecting [View >> Solution Explorer](#).

