How to Compile, Link, and Execute C or C++ Codes Using Microsoft Visual C++

1.   First, you need to click **Start** button, **Programs**, and then **Microsoft Visual C++ 5.0 or 6.0** to launch MS Visual C++, shown in Figure 1.
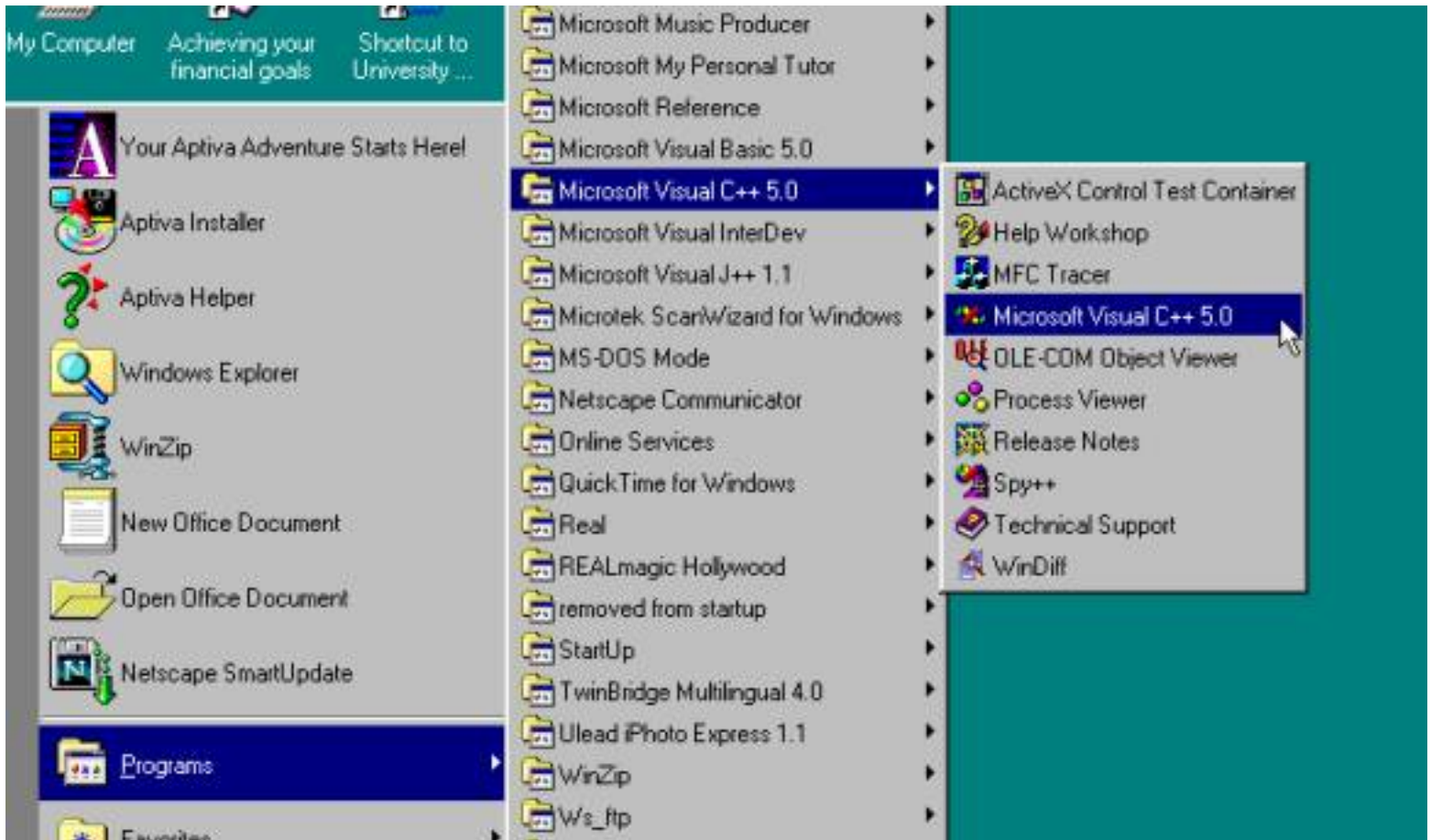

Figure 1 Start Visual C++ program.

2.   Close "Tip of the Day" message window shown in Figure 2, by clicking **Close** button. Now you are in Visual C++ program, shown in Figure 3.
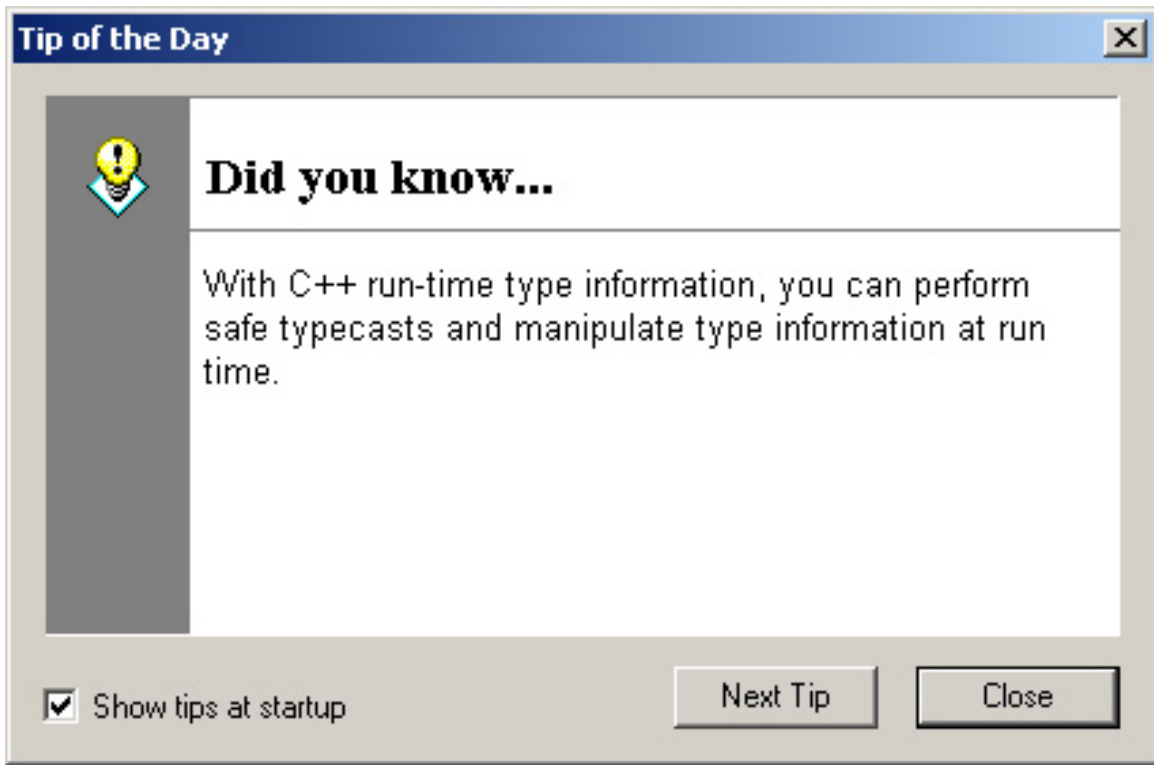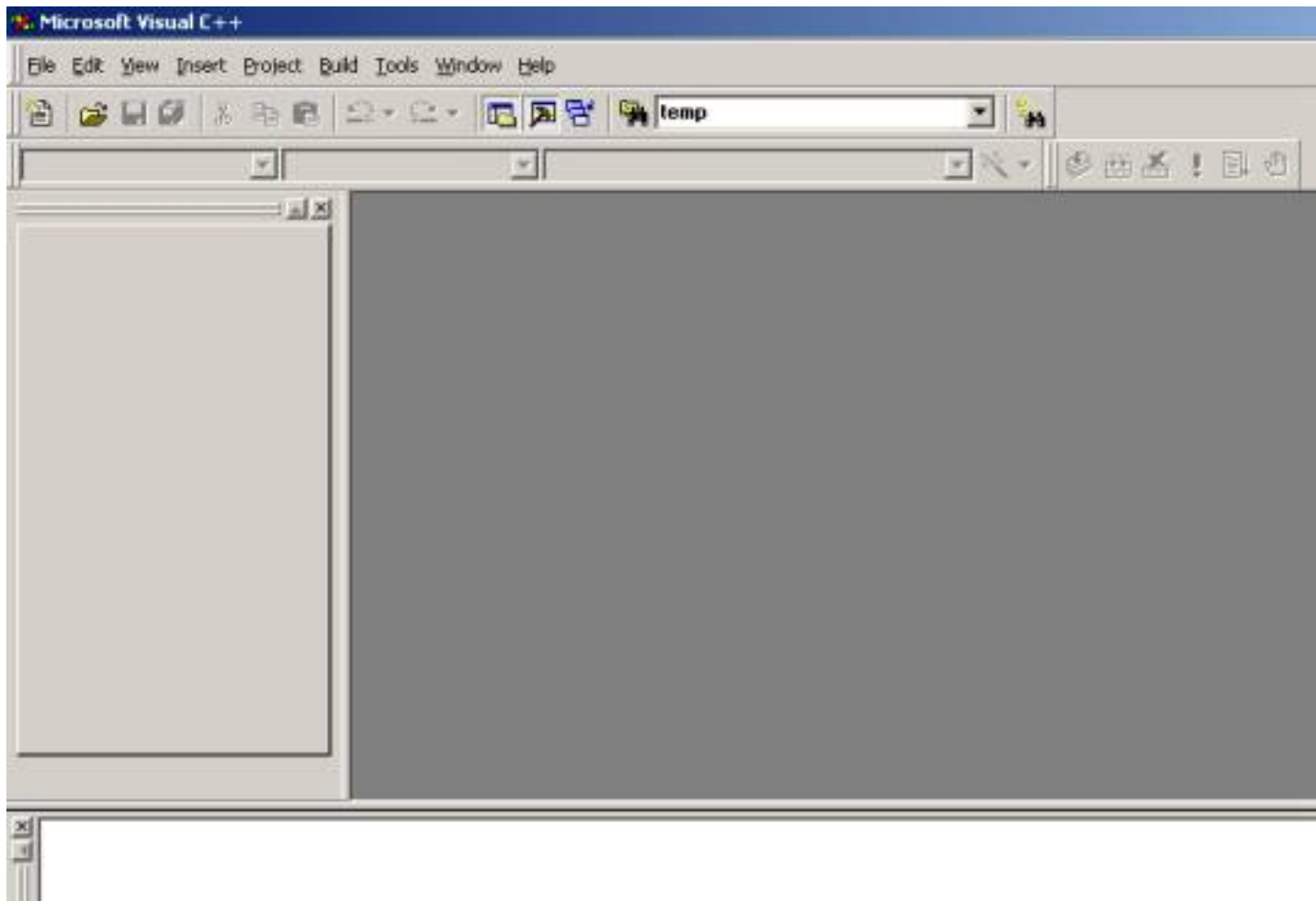
Figure 2 Tip window.

Figure 3 Visual C++ with blank project workspace.

3.   Click pull-down menu **File**, shown in Figure 4, and then **New** to create a new project, if you never create before, or you want to create another project. A new window with tab menus shows up. There are five tab menus including **Files**, **File Wizards**, **Projects**, **Workplaces**, and **Other Documents**. Make sure you go to **Projects** menu (Figure 5) by click tab of **Projects.**
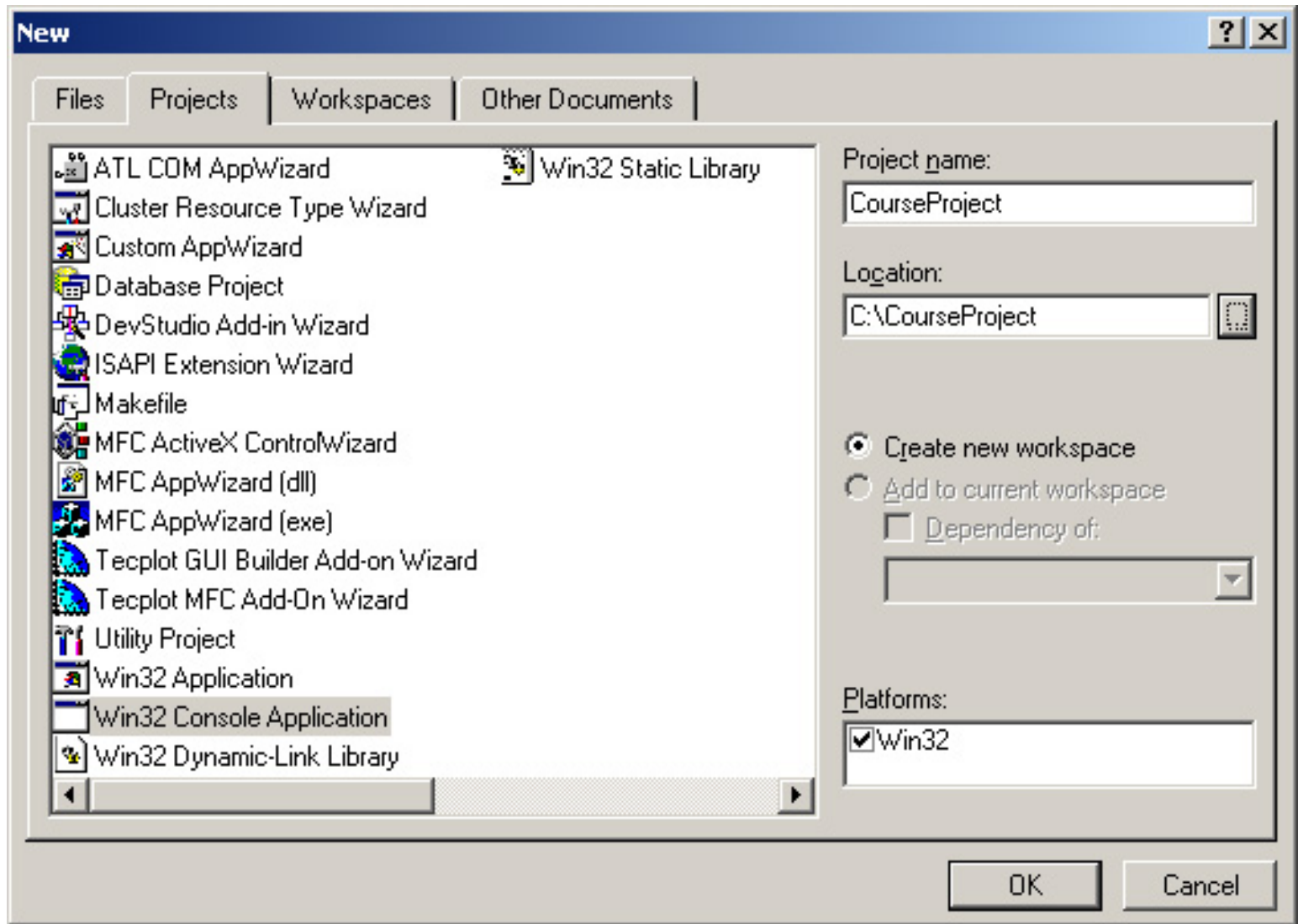

Figure 4 Create new project.

Figure 5 Project tab menu.

4. In **Projects** Menu, select **Win32 Console Application**; locate your disk place in which you can save your project, shown in Figure 6. Make sure input project name. For example you can type the project name as *CourseProject*, as displayed. Now Visual C++ automatically creates a directory or folder which has project named *CourseProject*. After you click **OK** button and click **Finish** button to close the **Win32 Console Application** Wizard window, shown in Figure 7 and **OK** button of **New Project Information** window, shown Figure 8. The project name share with the folder name, in which project file is saved. Then Visual C++ opens a new **Workspace** for you, shown in Figure 9.

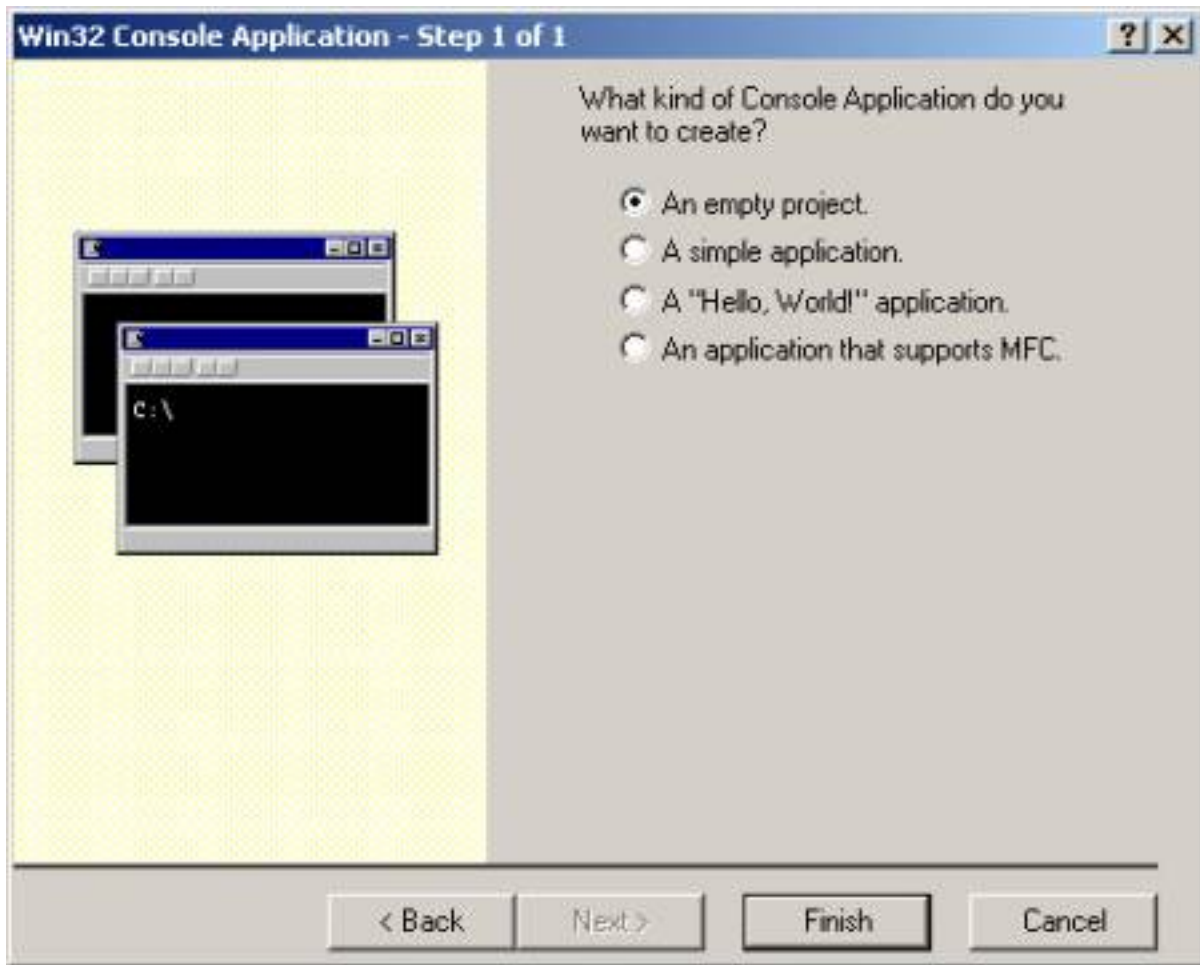Figure 6 Locate the folder in which your new project can be saved.

Figure 7 Win32 console application wizard window.

New Project Information

Win32 Console Application will create a new skeleton project with the following specifications:

+ Empty console application.
+ No files will be created or added to the project.

Project Directory:
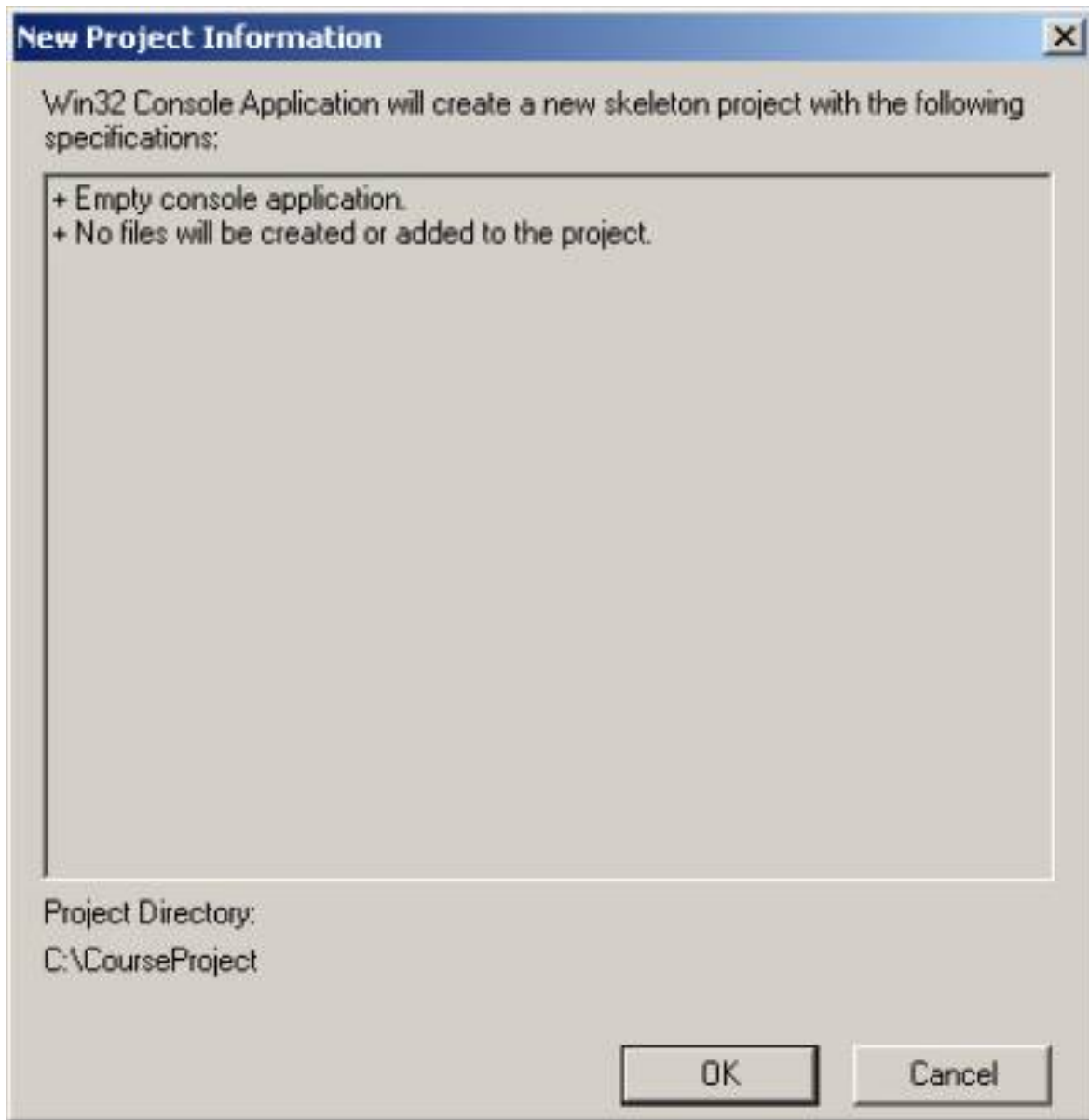C:\CourseProject

OK   Cancel

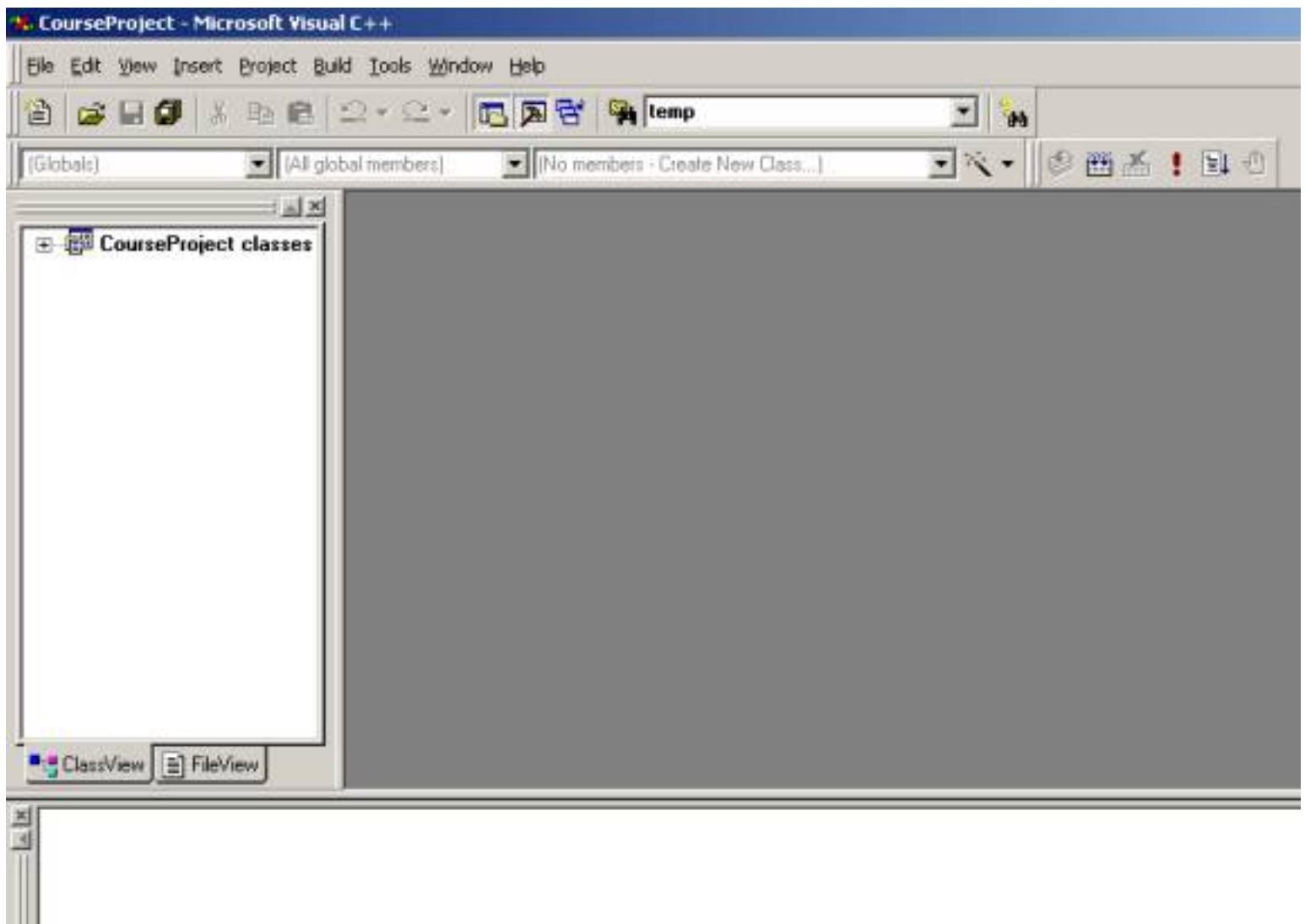Figure 8 New Project Information window.

Figure 9 Workspace with new project.

5. If you haven't had a C/C++ code, you can use Visual C++'s text editor to type one. IF you have a c/c++ file already save somewhere in your computer or disks, you do not need to create C/C++ file.

Now let assume you do not have the C/C++ file or you want to create a new C/C++ program. You can type your C or C++ code, you can click **New Text File** under the **File** Menu (Figure 10) to open a new editor window for you to type or edit your source code. Let's type the following simple C or C++ code.

C code	C++ code

| ```c
#include<stdio.h>

int main()
{
    printf("I am learning C now!\n");
    return 0;
}
``` | ```cpp
#include <iostream.h>
 int main()
{
cout << "I am learning C++ now!\n"; return 0;
}
``` |
|---|---|

Figure 10 Click to open text editor

```
#include<stdio.h>
main()
{

    printf("This is my first C code\n");
    return 0 |
```
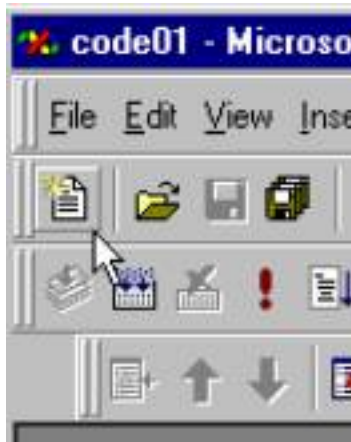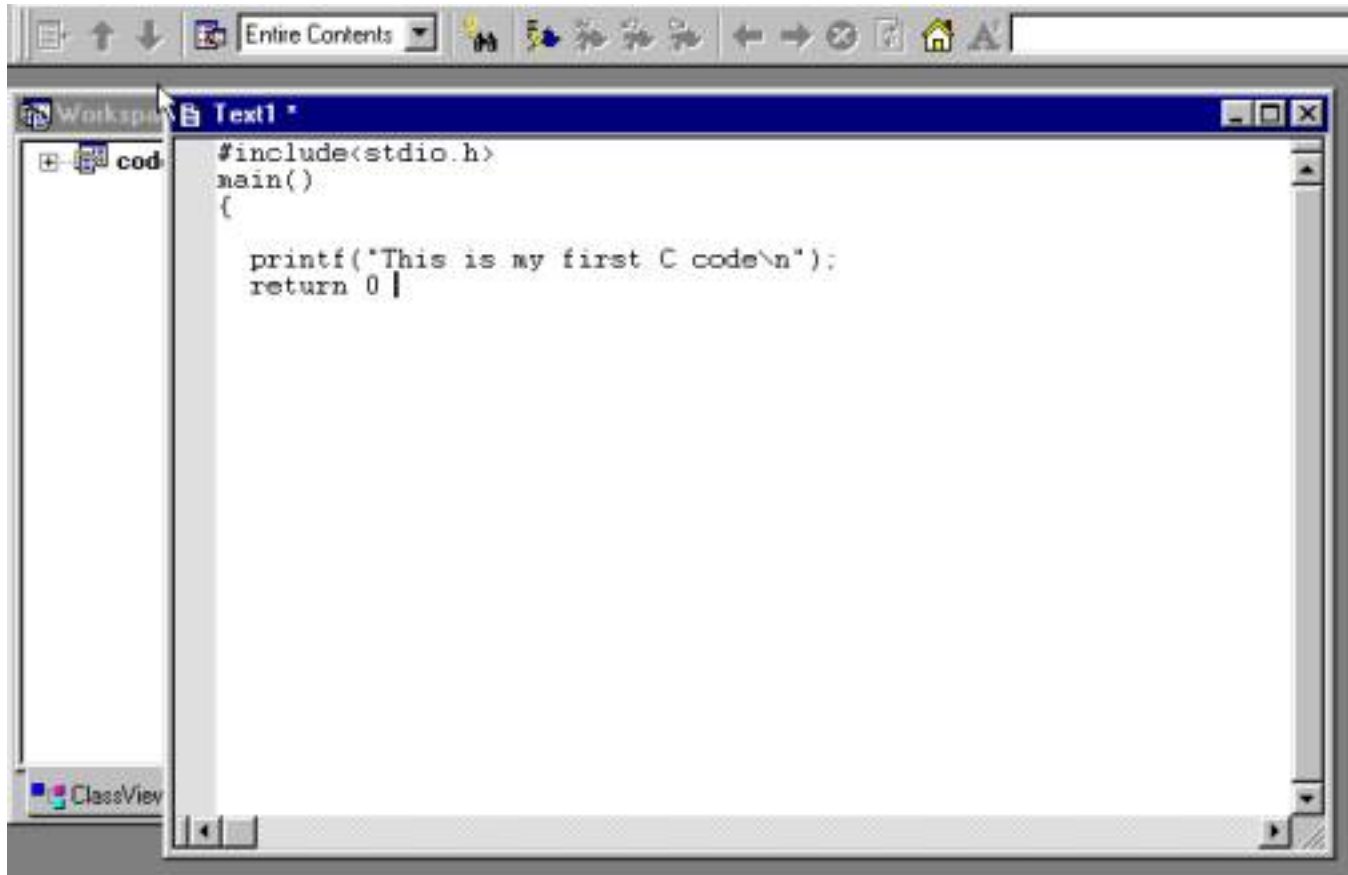
6.   After you accomplish your code type, click **File**, **Save as** to save your C or C++ source code (Figure 11). Visual C++ will open a window for you to save. Type the name of your C or C++ source code. For example, code01.c for C code and code01.cpp for C++ code. **Note**: step 5 and 6 can be avoided if you already typed your source code using **Notepad**, **Word**, or other word processing editors. In other words, you can create C++ source code using any editing software. For example, you can download codes from internet or copy example codes from CD or disk associated with textbooks.
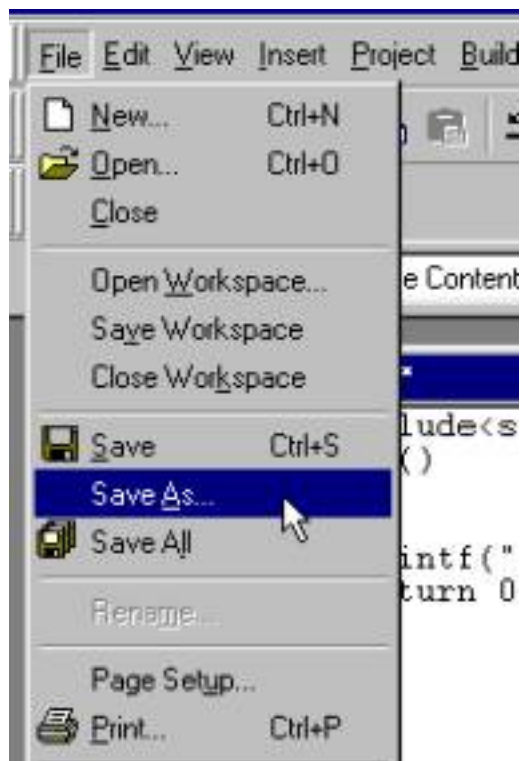
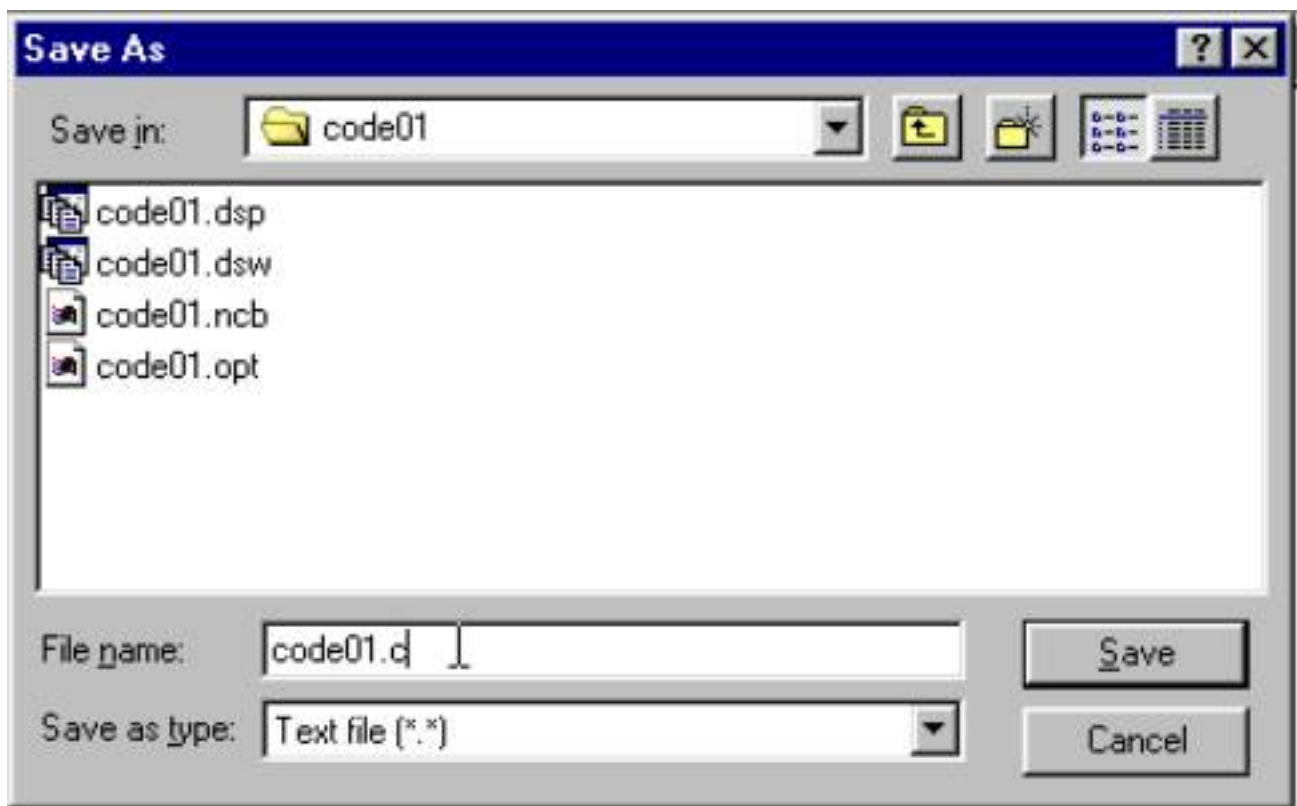Figure 11 Save your code in your computer somewhere.

Figure 12 Save As window to save your code.

7. Even though you typed the code. It does not mean you have load the code in the project

you have opened. You can save your code inside the project folder. That doesn't mean you load the code in your project. **This is very important note**. Now you need to add your source codes (say code01.cpp) to the project.

Go to pull-down menu **Project**, Click **Adds to Project**, then **Files**. Visual C++ will open a window called **Inset Files into Project** (Figure 13). Find out whether C or C++ source code has been add to your project or not. Then click **OK** button to insert it to the current project called code01.cpp, shown in Figure 14. You can go to **Workspace** window and click **FileView**, then click "+" in front of CouresProject files and "+" in front of Source files, you will find your source code, code01.c or code01.cpp. Double click code01.c or code01.cpp will open the editor window for you to modify the source code, if it has bugs.
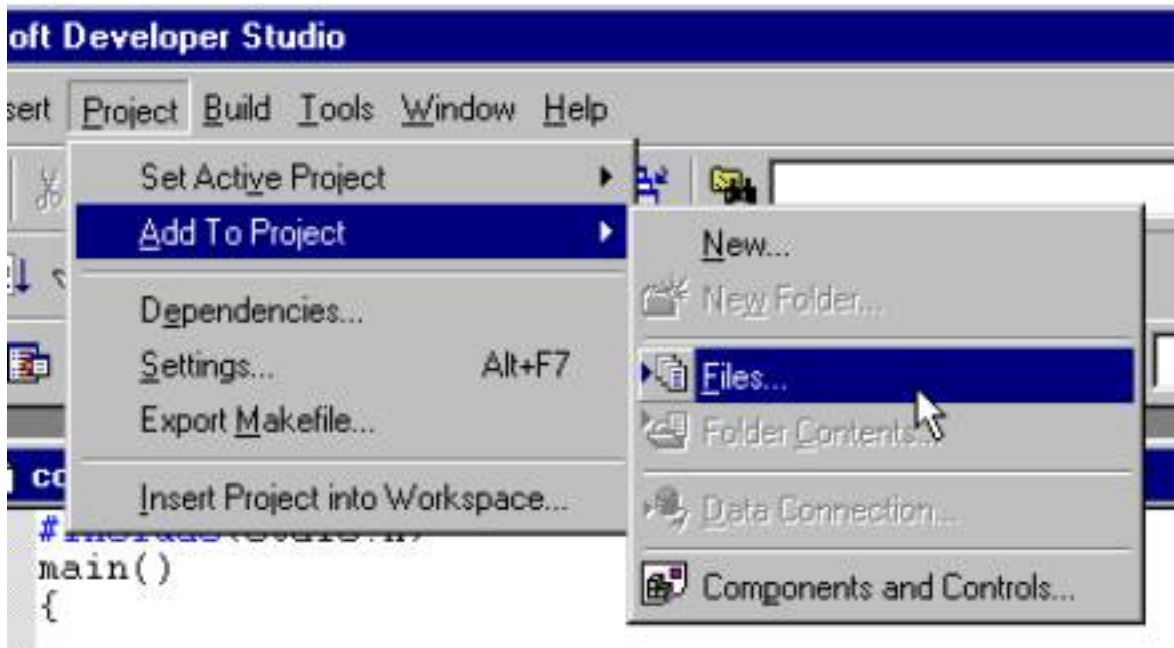

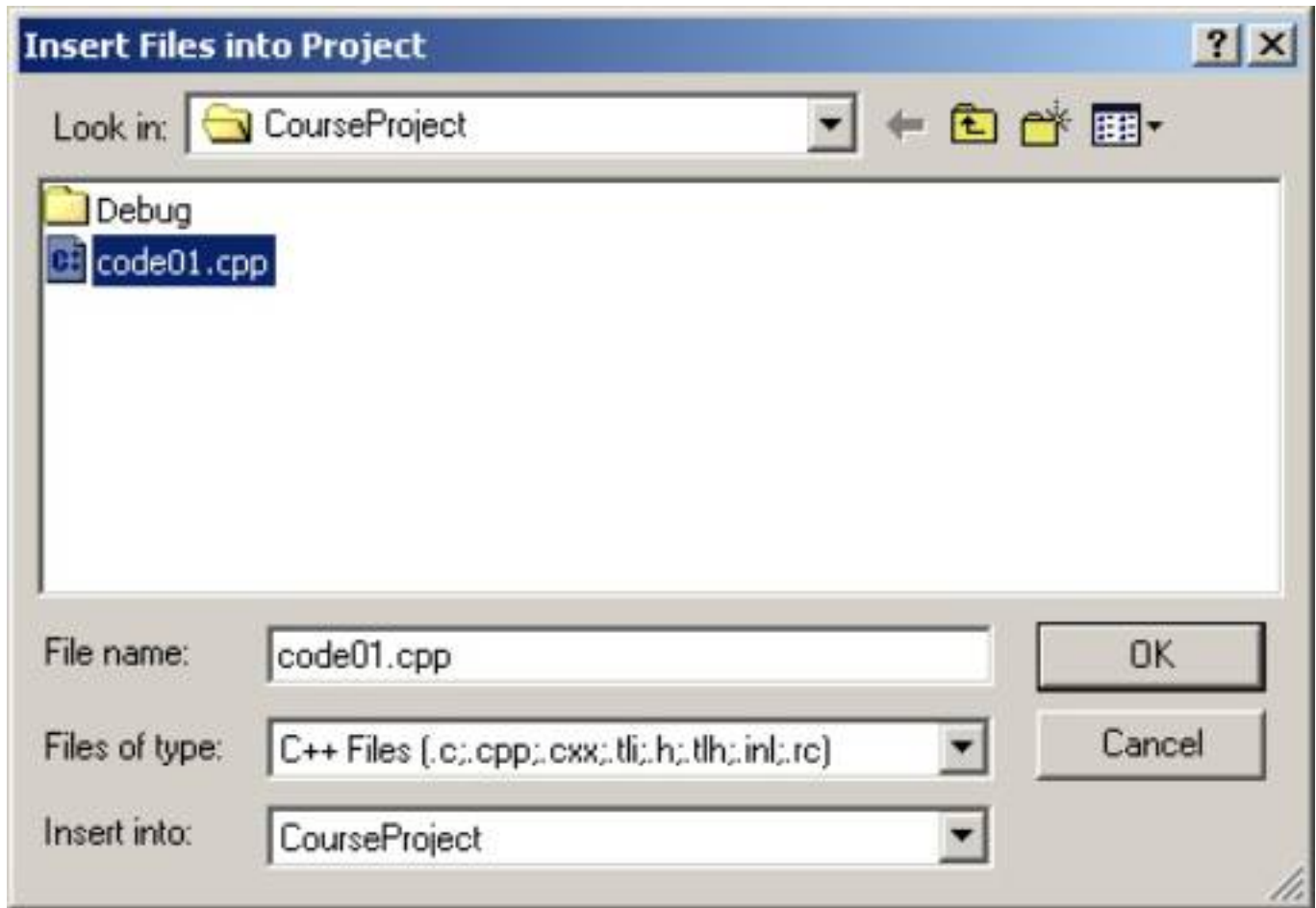Figure 13 Add your code into the project you open.
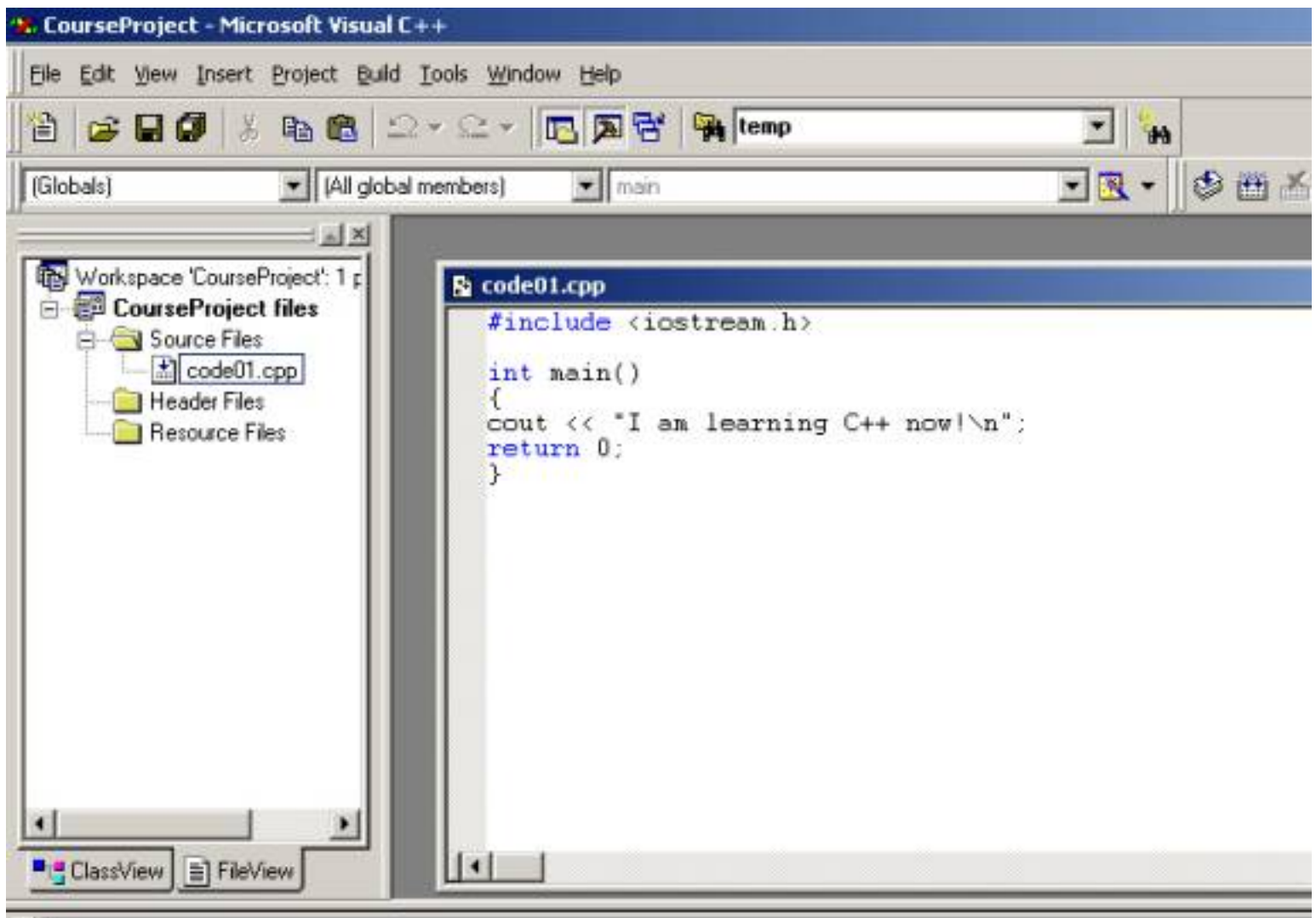
Figure 14 Select code to be added to the project.

Figure 15 Open added code for editing.

8. Now it is time for you to compile, link it by clicking pull-down menu, **Build**, then **Build Code01.exe.** Or press **F7** key.
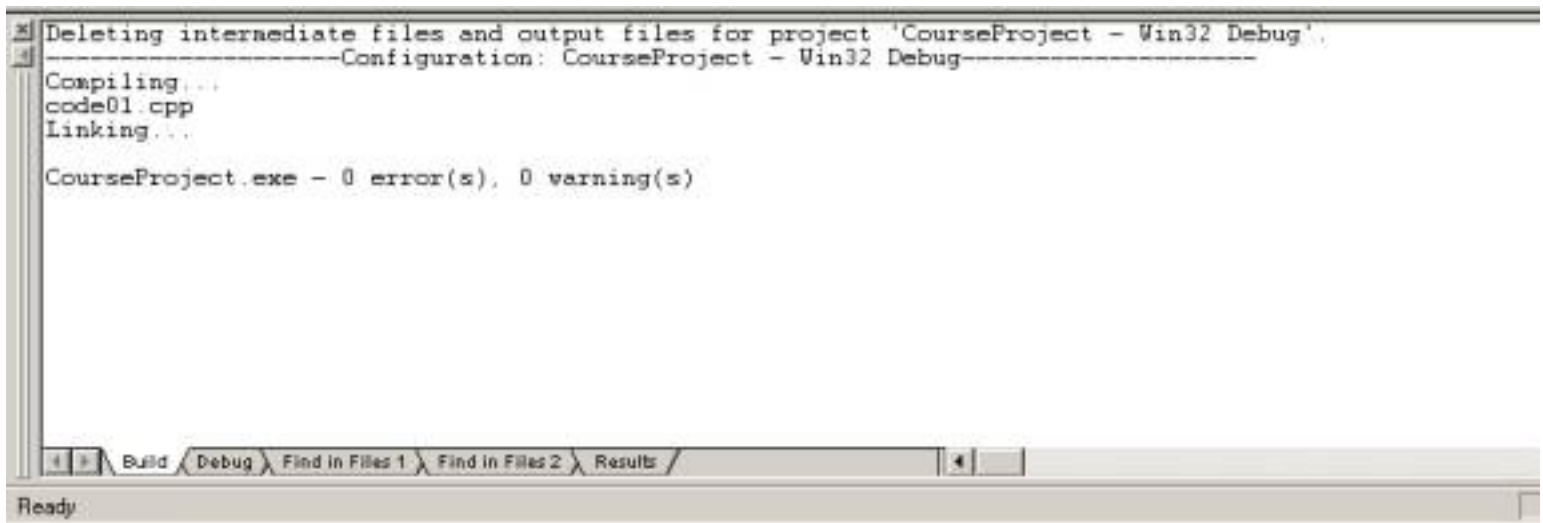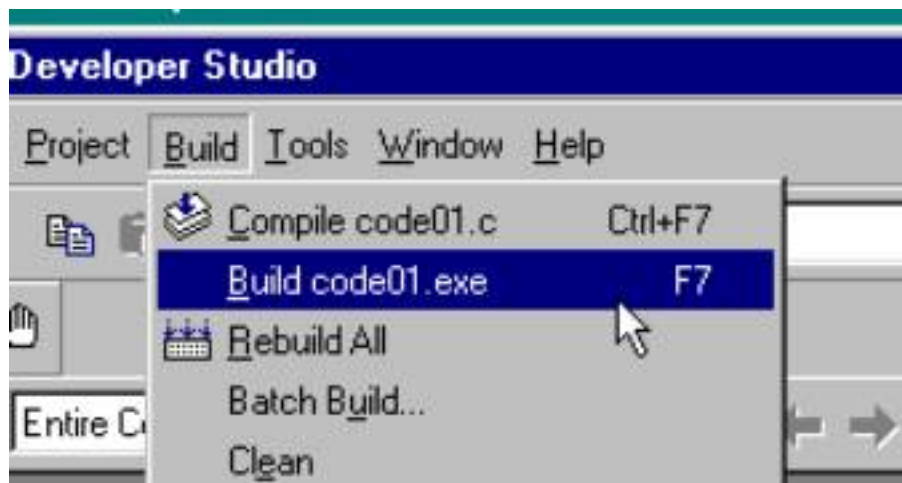
Figure 15 Compiling status window.

9. If no error message reported, you can execute it, by clicking pull-down menu, **Build**, then **Execute code01.exe** (or **press Ctrl+F5).**
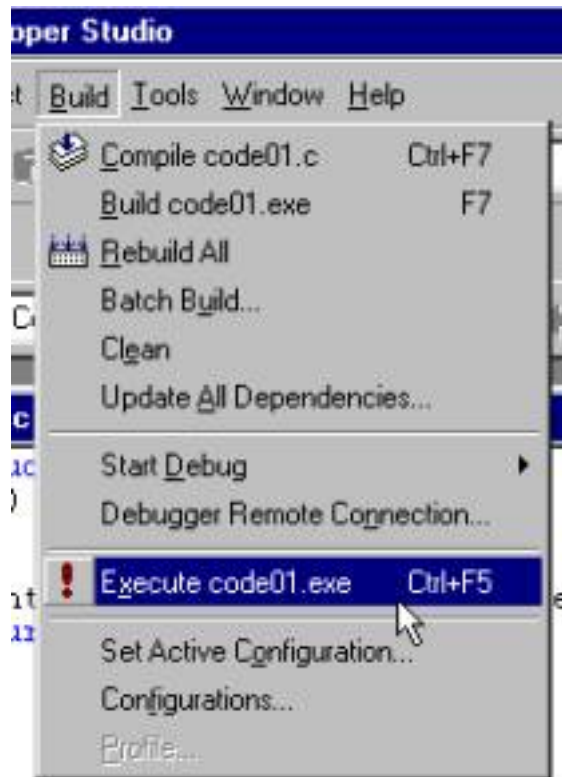
Figure 16 Execute code.

10. **Visual C++** brings you a **DOS console window** in which your computational outputs are displayed. Press any key to exit the window. You have done the job. See Figure 17.
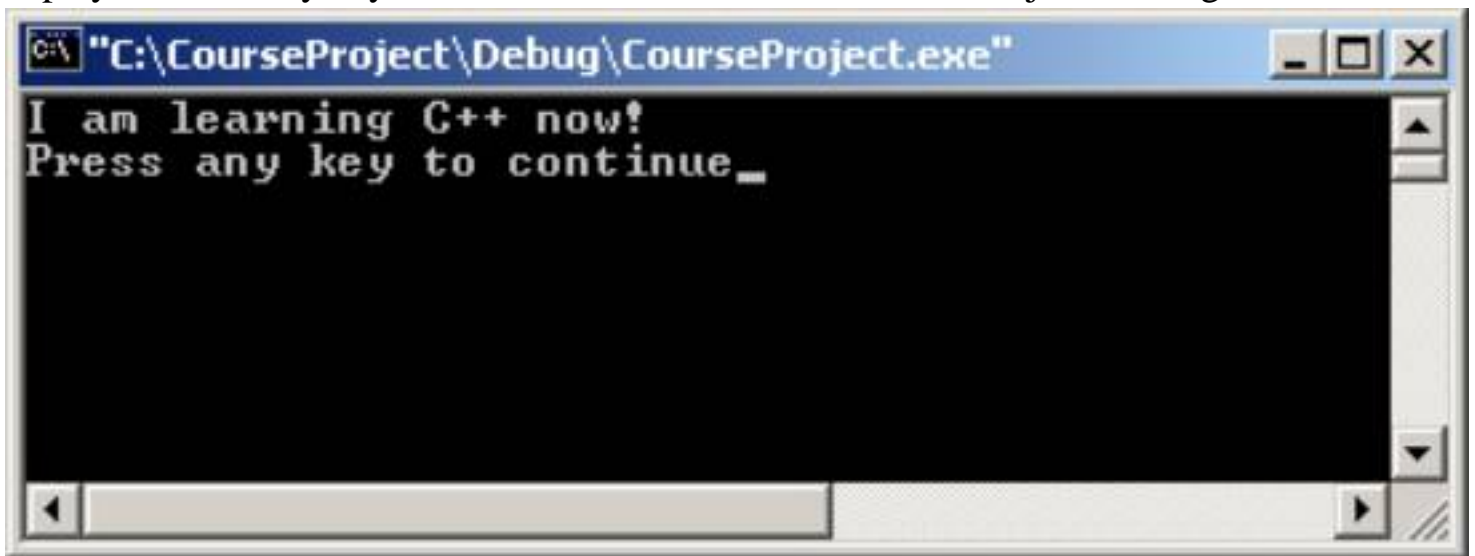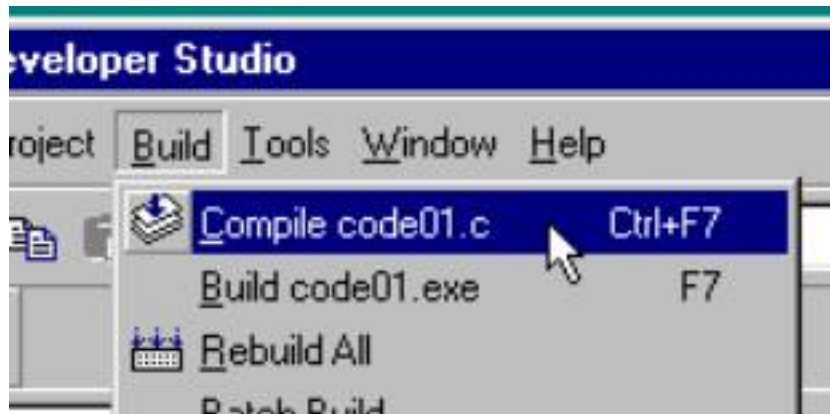

Figure 17 Result in Win 32 console window.

11. If you want to compile your source code only, you can go to **Workspace** window to open the editing window as mentioned in step 7. Click **Build**, then **Compile** code01.cpp (or press **Ctrl+F7** key).

12. After you accomplish your current project, make sure save the whole project by clicking **File** then **Save ALL**. Then go to **File**, then **Close Workspace**.

13. If you want to open your existing project, you go to **File**, then **Open Workspace....Visual C++** brings you a **Open Workspace** window. Go to **CoureProject** folder and double click **CourseProject.dsw**.

Note: The procedure is exactly the same for C and C++ programming.