

# Visual Studio 2010 简捷入门

# 一、Visual Studio 2010 图形界面

\* 启动 vs2010

\* 开始菜单

\* 所有程序

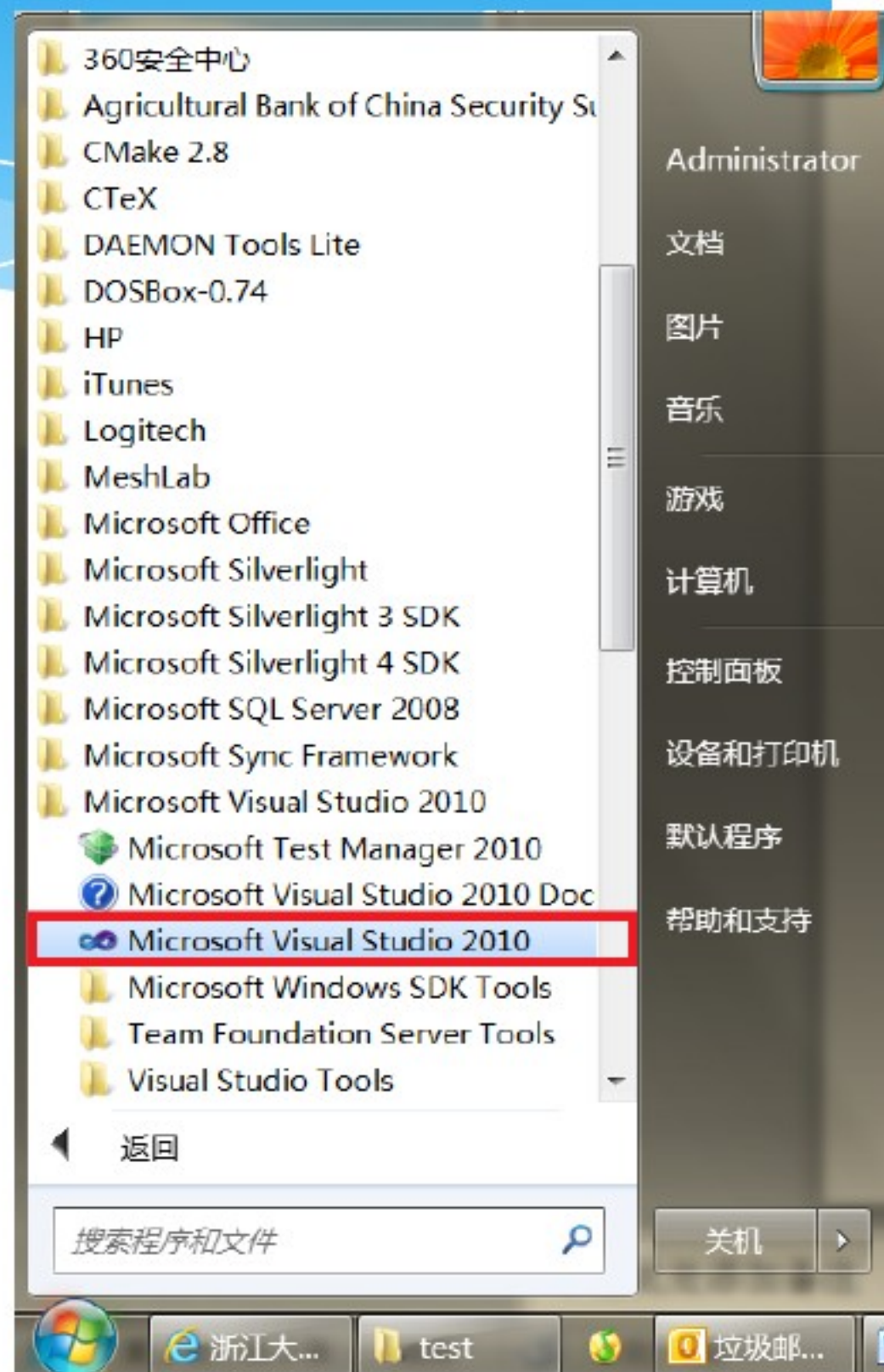
\* 找到文件夹

Microsoft Visual Studio 2010

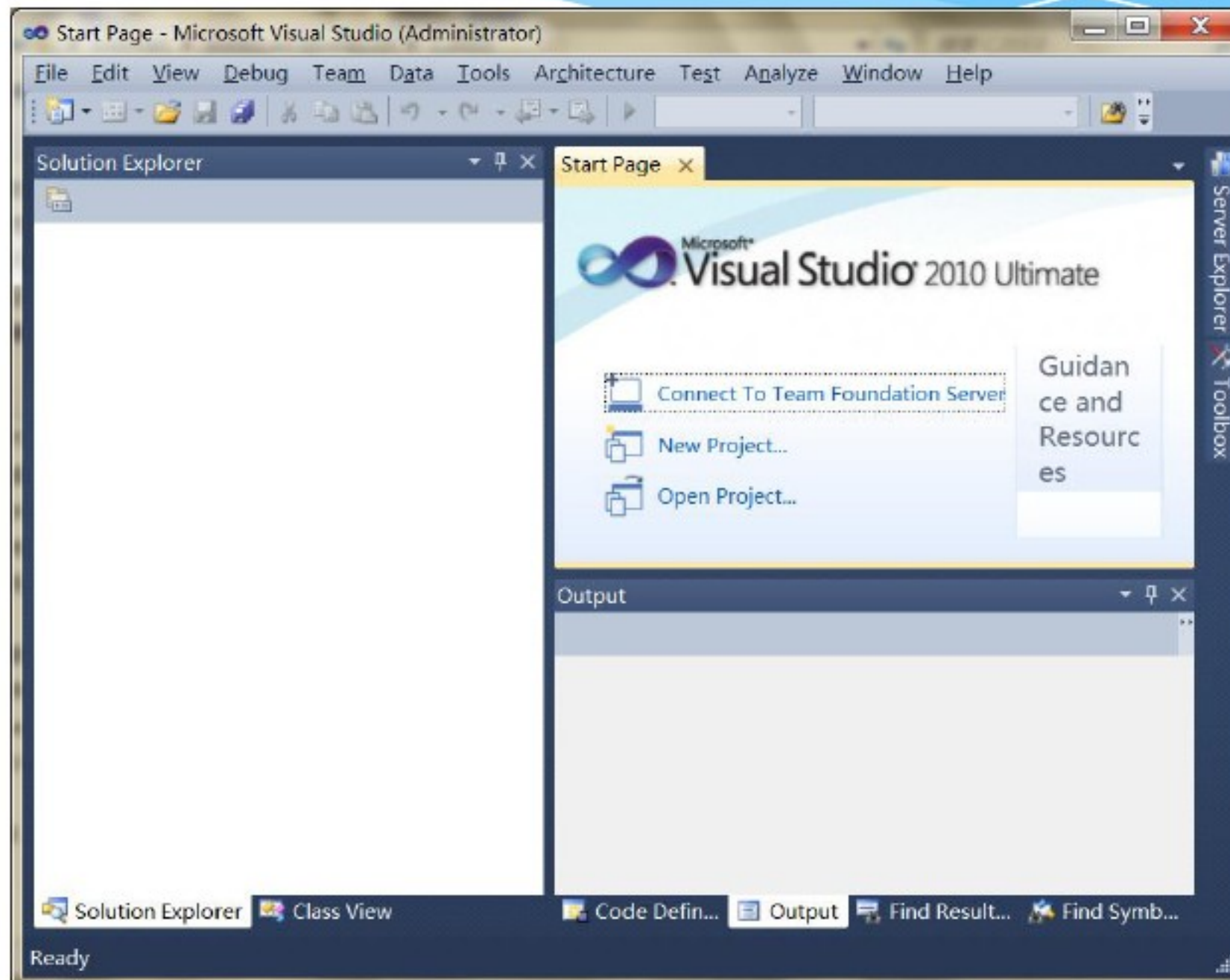
\* 找到程序

Microsoft Visual Studio 2010

\* 运行该命令



# 启动界面

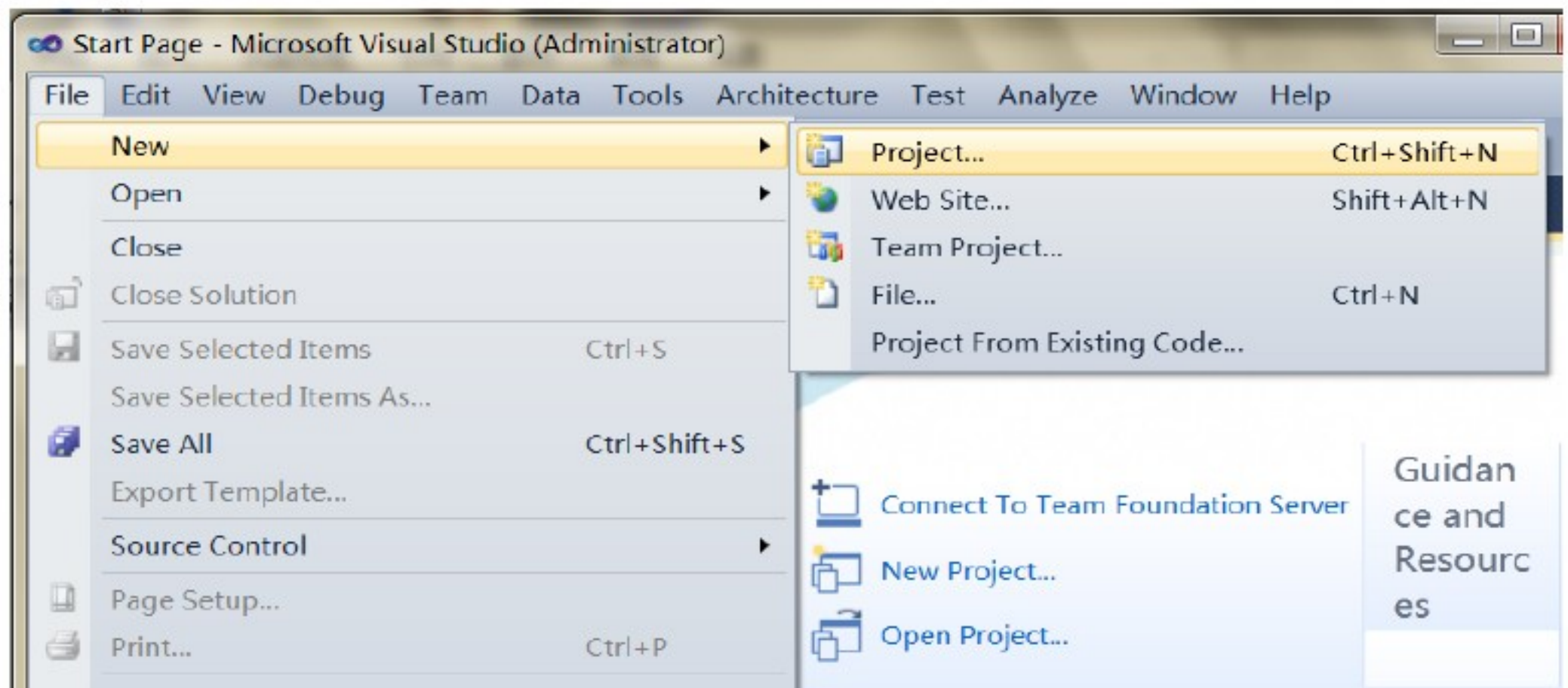


# 新建工程

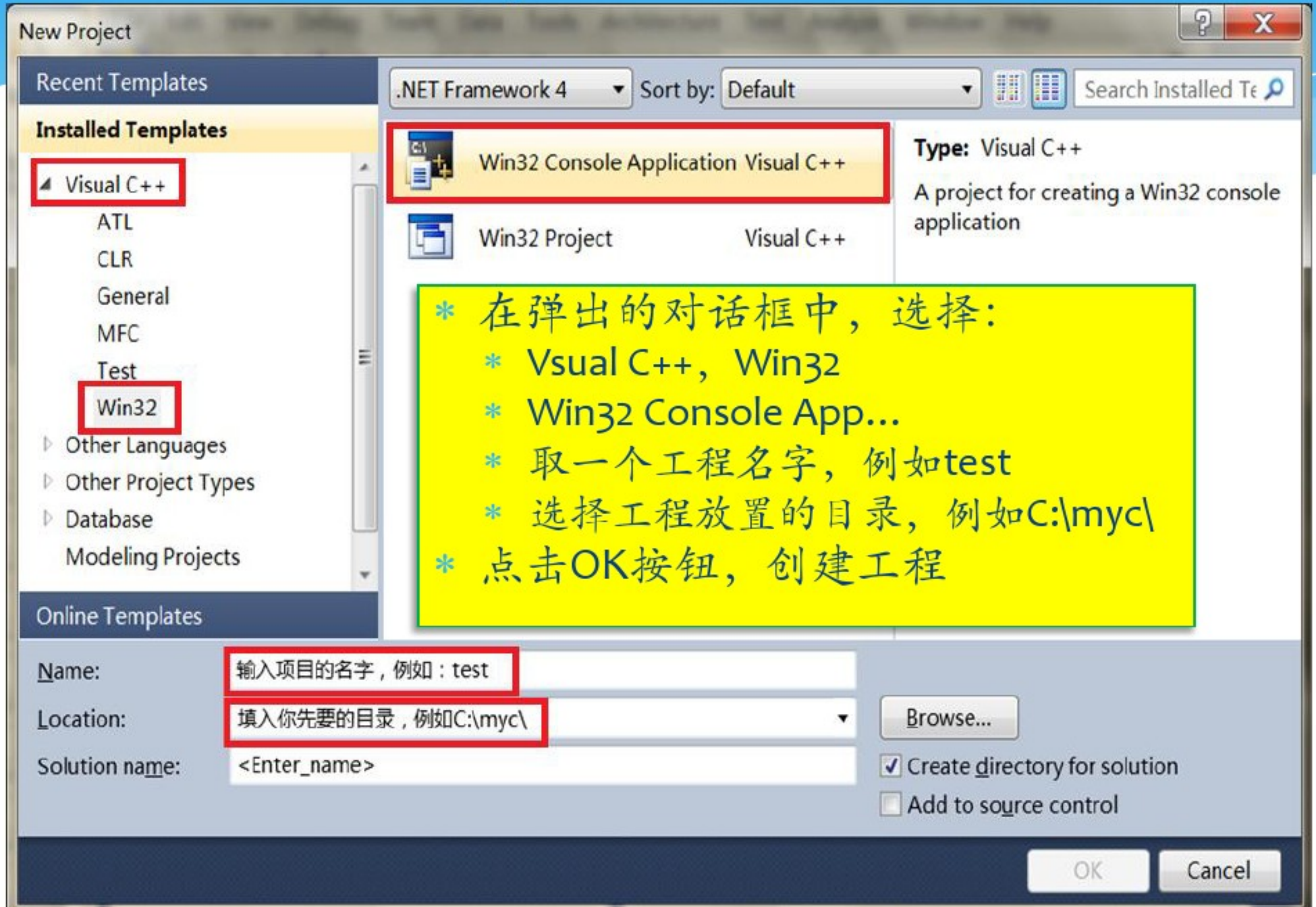
\* 主菜单: File → New → Project

\* 或者使用快捷键: Ctrl+Shift+N

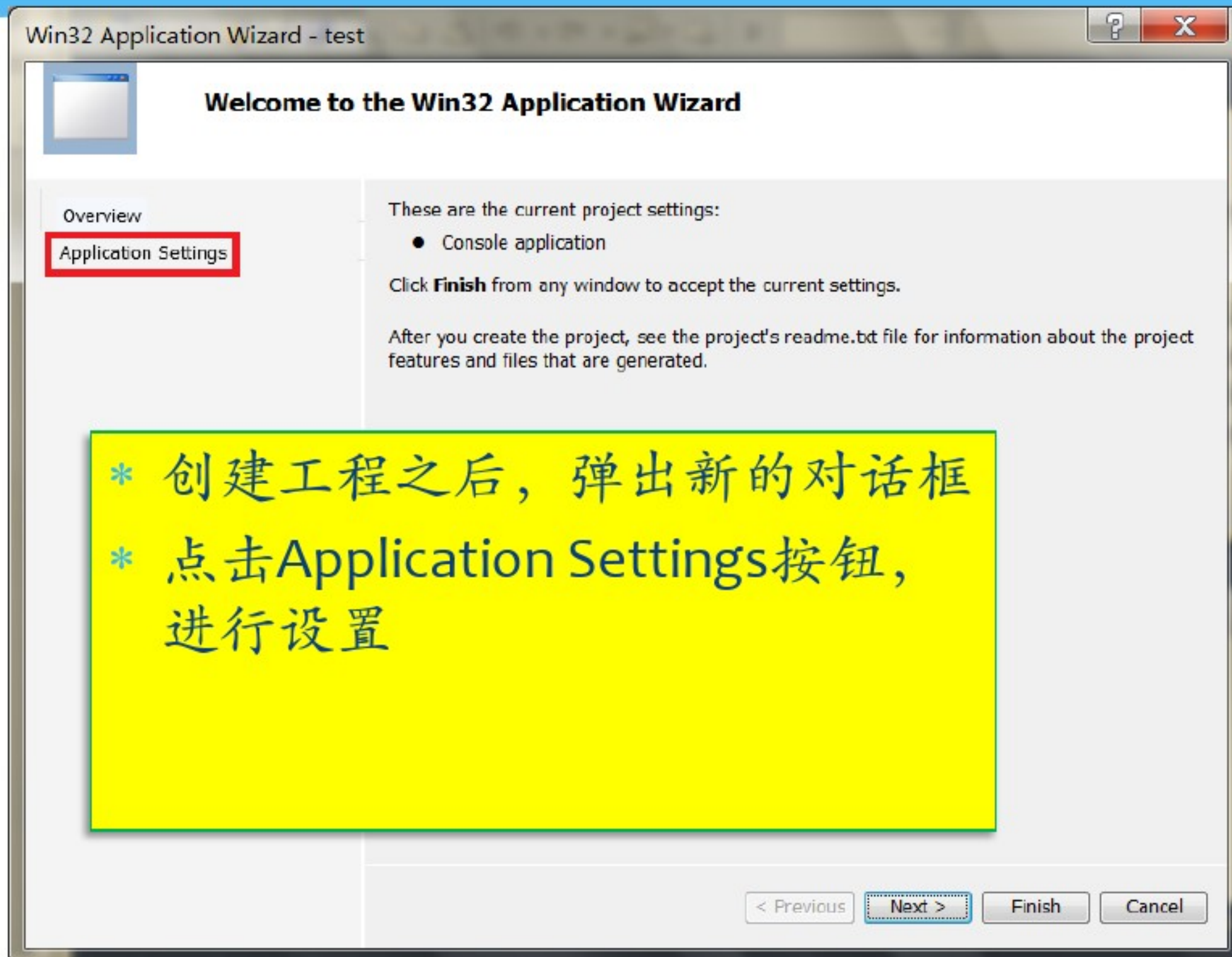
即同时按住: Ctrl, Shift 和字母N三个键



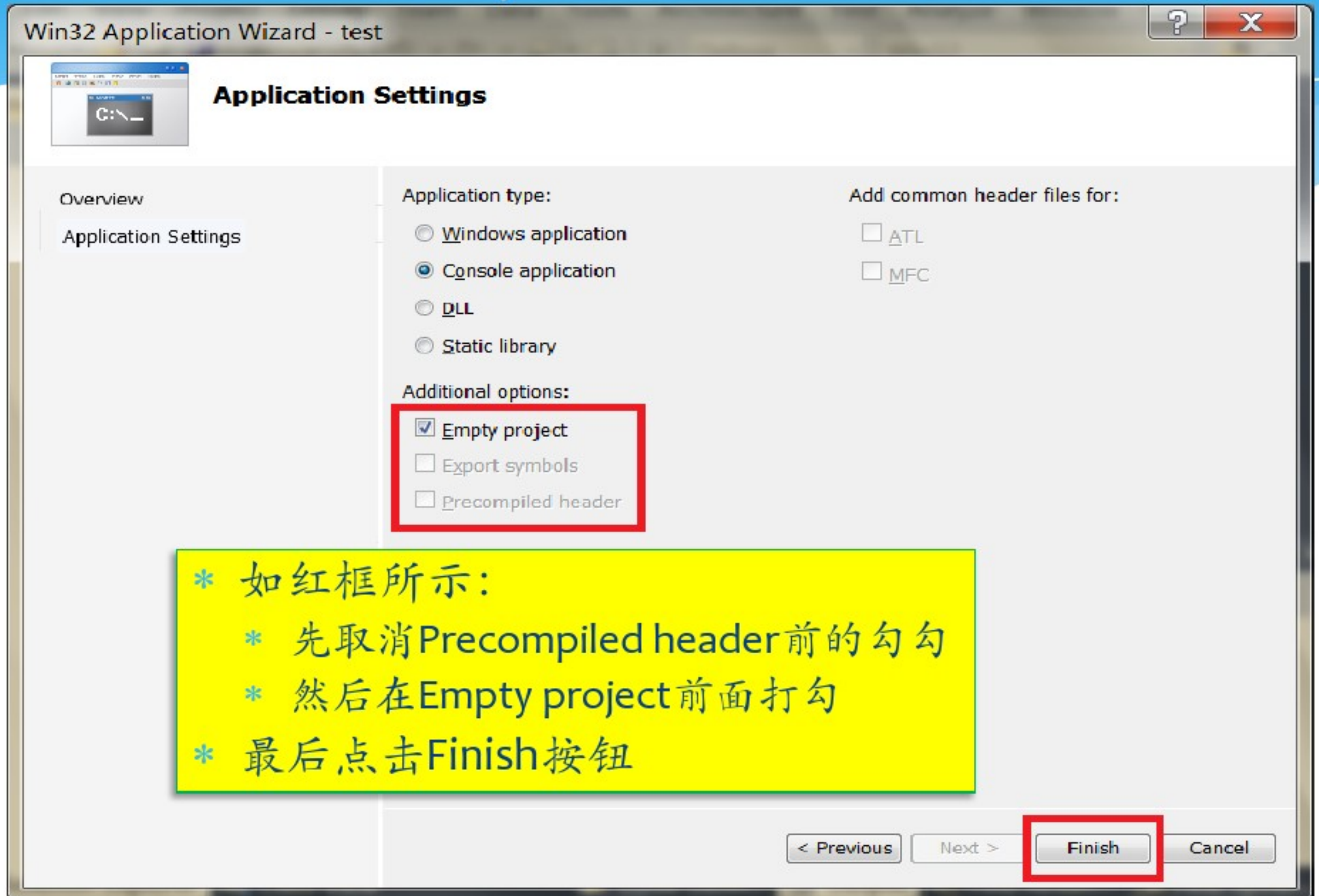
# 新建工程



# 新建工程



# 新建工程



\* 如红框所示:

\* 先取消Precompiled header前的勾勾

\* 然后在Empty project前面打勾

\* 最后点击Finish按钮

Solution Explorer

Solution 'test' (1 project)

test

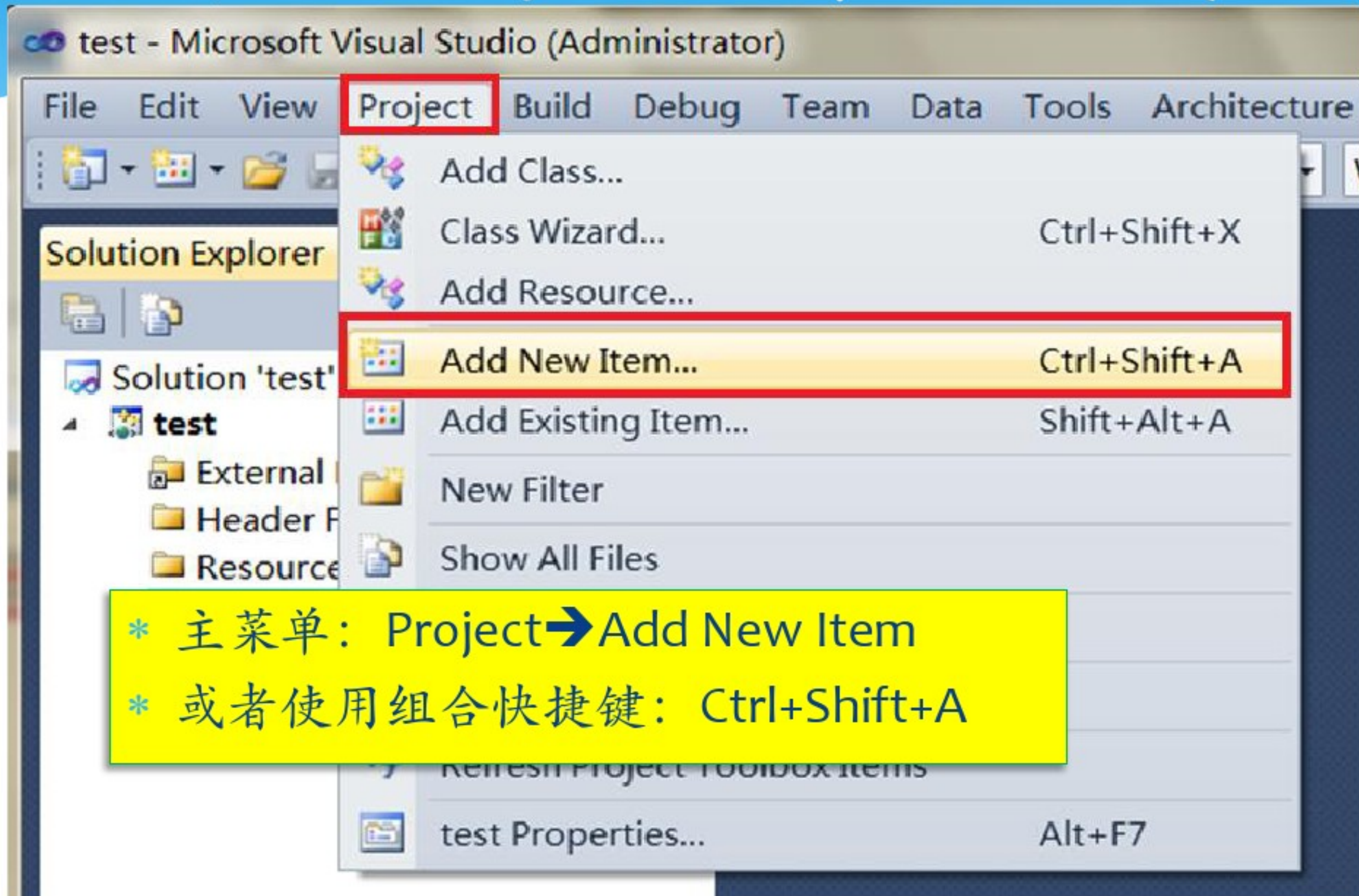
- External Dependencies
- Header Files
- Resource Files
- Source Files

\* 工程test创建完成  
\* 可以开始软件开发了

- \* 左边栏是工程文件的树状浏览器
- \* SourceFiles节点中放置c/c++源程序

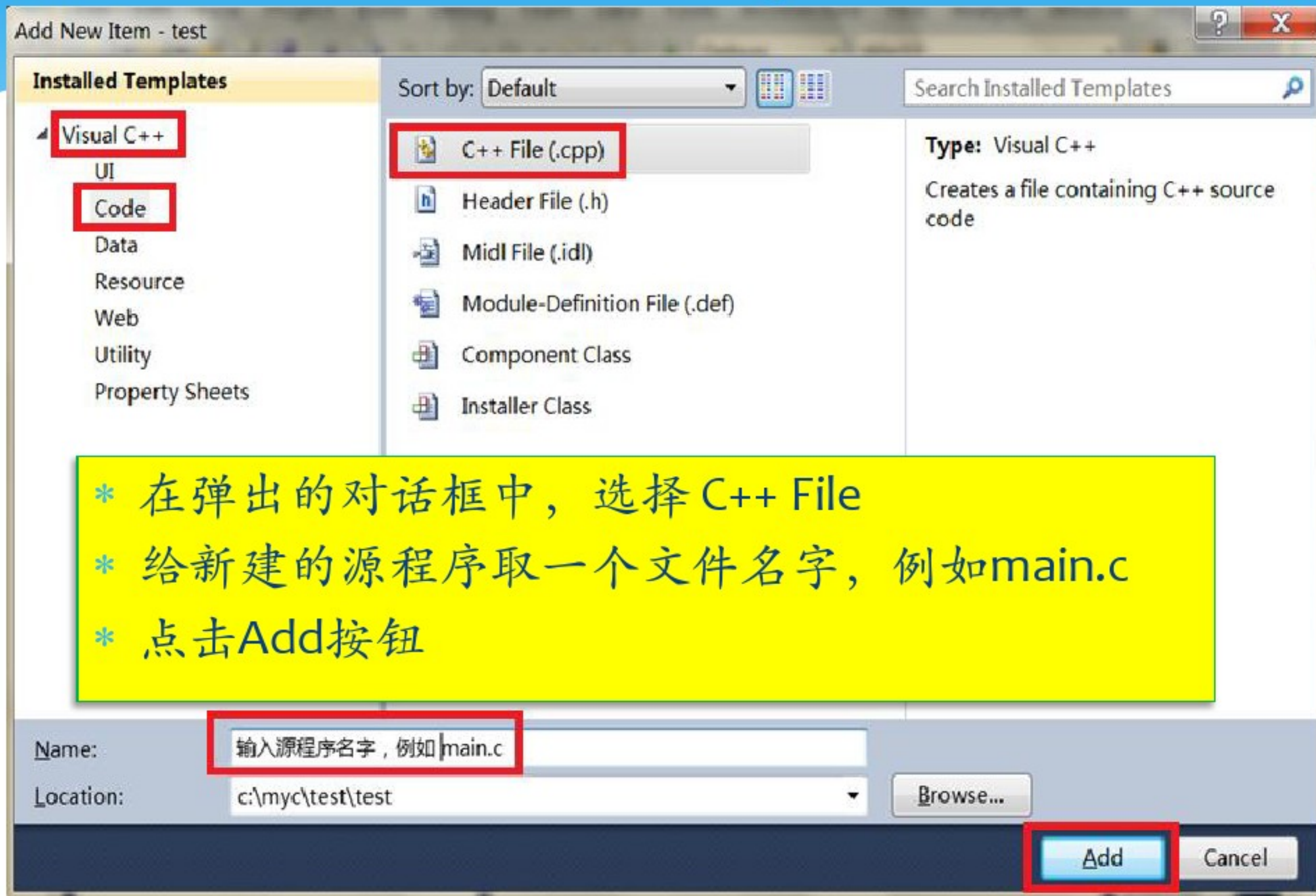


# 1. 在工程中创建新的源程序



- \* 主菜单：Project → Add New Item
- \* 或者使用组合快捷键：Ctrl+Shift+A

# 1.1 创建源程序main.c



# 1.2 创建源程序main.c

test - Microsoft Visual Studio (Administrator)

File Edit View Project Build Debug Team Data Tools Architecture Test Analyze Window Help

Debug Win32

Solution Explorer

main.c

Solution 'test' (1 project)

- test
  - External Dependencies
  - Header Files
  - Resource Files
  - Source Files
    - main.c

(Global Scope) main()

```
#include <stdio.h>

void main()
{
    printf("Hello World\n");
}
```

main VCC

C++

(N main  
Fil c:\my  
Fu main  
Isl False  
Isl **False**  
Is( False  
Is( False  
Isl False  
Ty void

Solution Explorer Class View Code Defi... Output Find Resul... Find Sym...

Item(s) Saved Ln 5 Col 29 Ch 26 INS

这里看到main.c 程序文件

这里可以编辑main.c 程序文件，输入：  
#include <stdio.h>

```
void main()
{
    printf("Hello World\n");
}
```

## 2 编译+链接

The screenshot shows the Microsoft Visual Studio interface. The 'Build' menu is open, with 'Build Solution' highlighted and its keyboard shortcut 'F7' shown. Below the menu, a yellow box contains instructions: '\* 主菜单: Build → Build Solution' and '\* 或者组合快捷键: Ctrl+Alt+F7'. The 'Output' window is open at the bottom, showing the build process. A yellow box labeled '错误信息输出窗口' (Error message output window) has an arrow pointing to the 'Output' window. The output text includes: '1> Deleting file "Debug\test.unsuccessfulbuild".', '1> Touching "Debug\test.lastbuildstate".', '1>', '1>Build succeeded.', '1>', '1>Time Elapsed 00:00:02.91', and '==== Build: 1 succeeded, 0 failed, 0 up-to-date,'. The status bar at the bottom shows 'Ready', 'Ln 19', 'Col 1', 'Ch 1', and 'INS'.

\* 主菜单: Build → Build Solution

\* 或者组合快捷键: Ctrl+Alt+F7

错误信息输出窗口

```
1> Deleting file "Debug\test.unsuccessfulbuild".
1> Touching "Debug\test.lastbuildstate".
1>
1>Build succeeded.
1>
1>Time Elapsed 00:00:02.91
==== Build: 1 succeeded, 0 failed, 0 up-to-date,
```

## 2.1 错误处理

The screenshot shows the Microsoft Visual Studio interface. The Solution Explorer on the left shows a project named 'test' with a source file 'main.c'. The main editor window displays the code for 'main.c' with the following content:

```
#include <stdio.h>

void main()
{
    printf("Hello World\n");
    printf("Here I am);
}
```

The line `printf("Here I am);` is highlighted with a red box, indicating a syntax error. A yellow callout box with a red border contains the text: "故意输入一行有错误的源程序 printf("Here I am 然后重新Build(方法如前所述)".

The Output window at the bottom shows the build process results, with the following error messages highlighted in red boxes:

```
>c:\myc\test\test\main.c(6): error C2001: newline in
>c:\myc\test\test\main.c(7): error C2143: syntax err
1> Build FAILED.
1>
1> Time Elapsed 00:00:00.14
===== Build: 0 succeeded, 1 failed, 0 up-to-date,
```

A yellow callout box with a red border and an arrow points to the error messages, containing the text: "生成新的错误信息".

The status bar at the bottom left indicates "Build failed".

# 错误信息

Output

1> main.c

1>c:\myc\test\test\main.c(6): error C2001: newline in

1>c:\myc\test\test\main.c(7): error C2143: syntax error

1>

1>Build FAILED.

1>

1>Time Elapsed 00:00:00.19

==== Build: 0 succeeded, 1 failed, 0 up-to-date,

## 2.2 错误信息定位

\* 按F4键找到错误信息对应的源代码

错误信息对应的源代码

错误信息

The screenshot displays the Visual Studio IDE interface for a project named 'test'. The Solution Explorer on the left shows the project structure. The main editor window displays the source code for 'main.c', which includes `<stdio.h>` and a `main()` function. A red box highlights a vertical line in the code editor, indicating the location of the error. The Output window at the bottom shows the error message: `1>c:\myc\test\test\main.c(6): error C2001: newline in constant`. A red box highlights this error message. A yellow box with the text '错误信息' (Error message) has an arrow pointing to the error message in the Output window. Another yellow box with the text '错误信息对应的源代码' (Source code corresponding to the error message) has an arrow pointing to the vertical line in the code editor. The status bar at the bottom shows the error message: `error C2001: newline in constant`, along with the current line and column numbers: `Ln 6 Col 1 Ch 1`.

## 2.3 错误信息更正

The screenshot shows the Microsoft Visual Studio interface with the following components:

- Solution Explorer:** Shows a project named 'test' with folders for 'External Dependencies' and 'Header Files'. A yellow box with the text '更正源程序中代码错误' (Correct code errors in the source program) has a red arrow pointing to the code editor.
- Code Editor:** Displays the source code for 'main.c'. The code is:

```
#include <stdio.h>

void main()
{
    printf("Hello World\n");
    printf("Here I am\n");
}
```
- Output Window:** Shows the build output with the following text:

```
1> Initializing build status.
1> Deleting file "Debug\test.unsuccessfulbuild".
1> Touching "Debug\test.lastbuildstate".
1>
1>Build succeeded.
1>
1>Time Elapsed 00:00:02.12
===== Build: 1 succeeded, 0 failed, 0 up-to-date,
```
- Class View:** Shows the class hierarchy for 'main VCC' with a table of symbols:

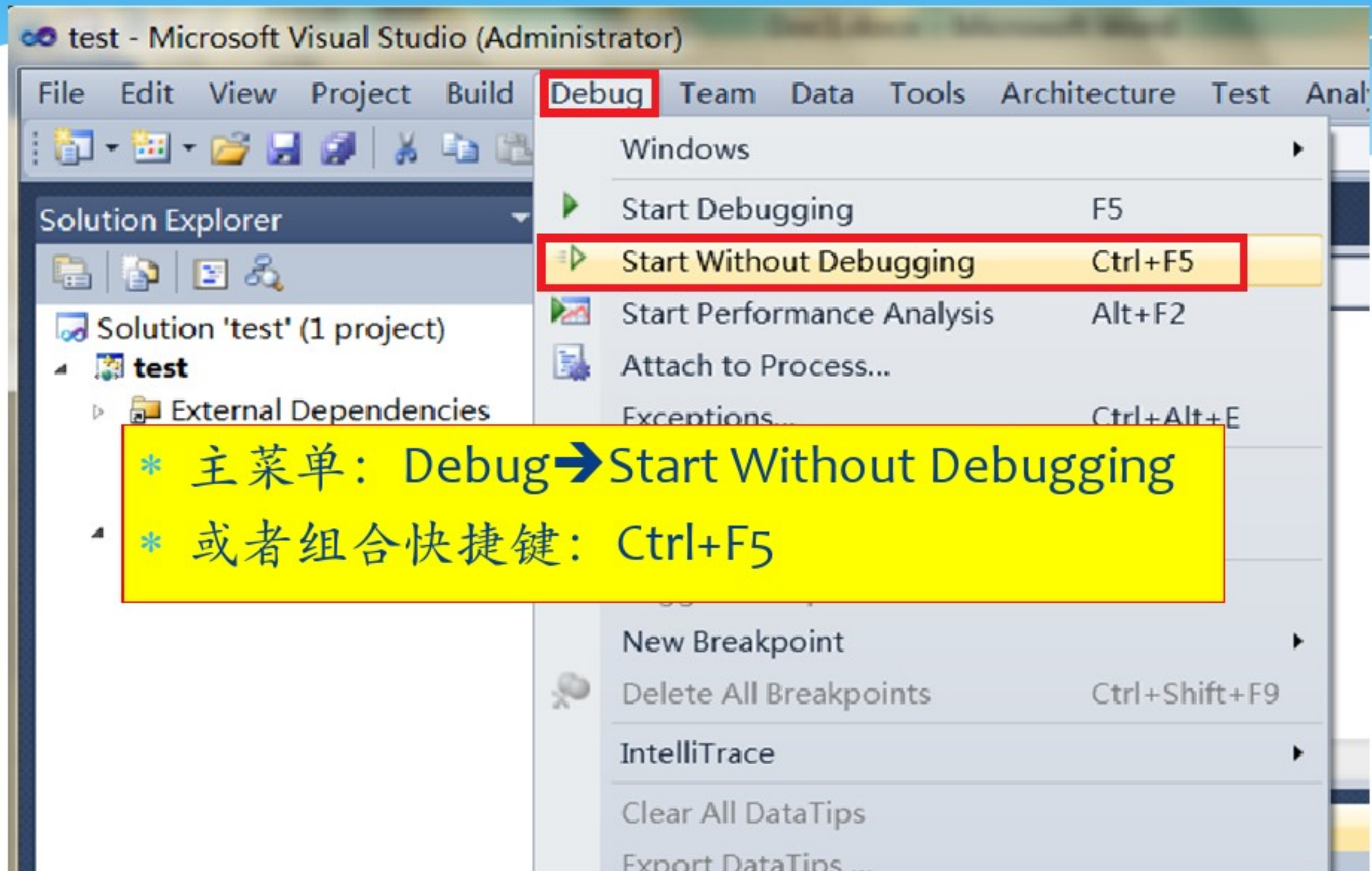
| Symbol        | Is    | Value |
|---------------|-------|-------|
| (N main       |       |       |
| File c:\my    |       |       |
| Function main |       |       |
| Is            | False |       |
| Is            | False |       |
| Is            | False |       |
| Is            | False |       |
| Is            | False |       |
| Type          | void  |       |

A yellow box with the text '\* 然后重新Build(方法如前所述)' (Then rebuild (method as described)) is positioned between the code editor and the output window. Another yellow box with the text '成功了' (Success) has a red arrow pointing to the 'Build succeeded' message in the output window.

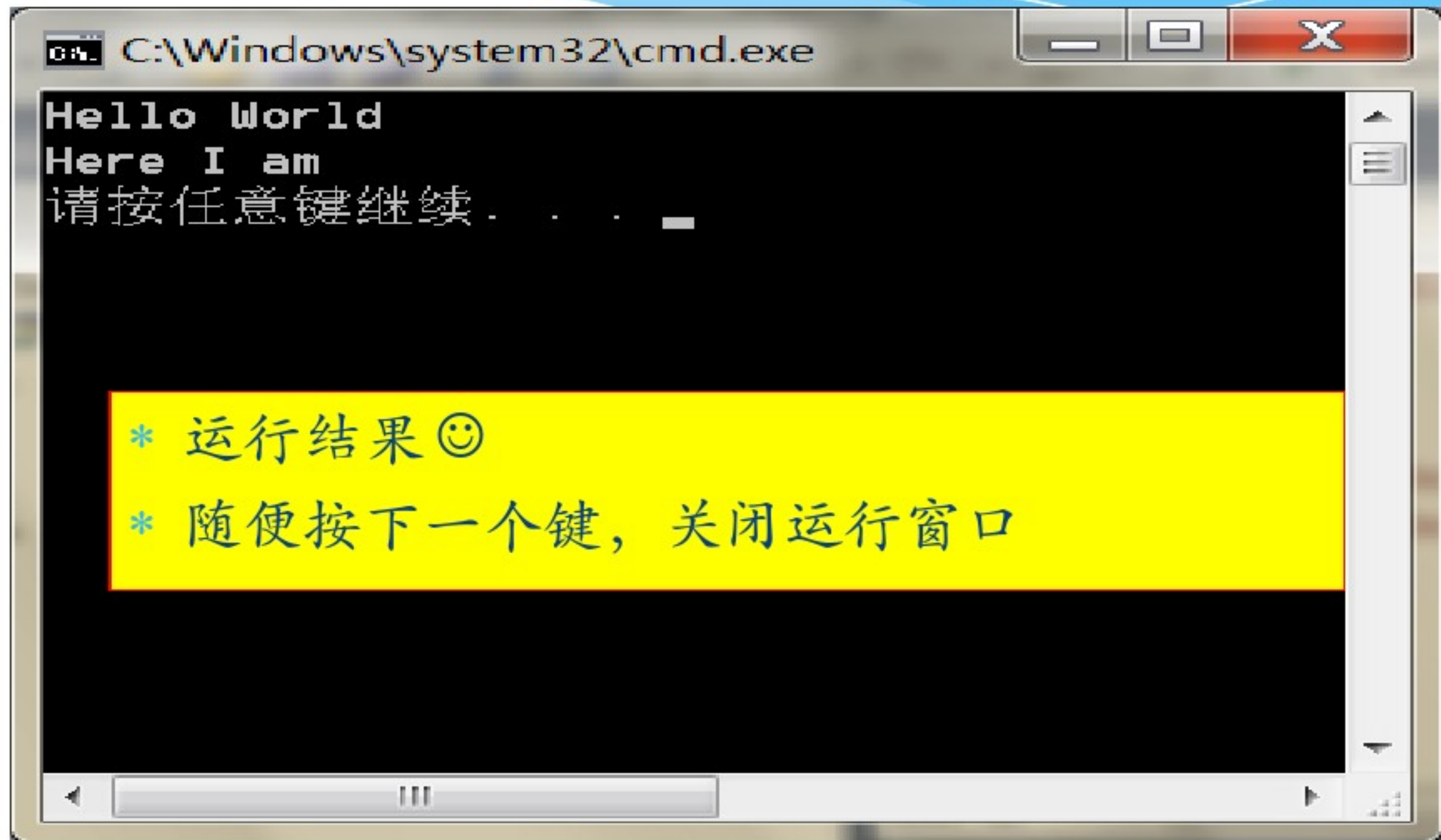
At the bottom left, a status bar displays 'Build succeeded'.



# 3 运行测试程序



# 3 运行测试程序



The image shows a Windows command prompt window with the following content:

```
C:\Windows\system32\cmd.exe  
Hello World  
Here I am  
请按任意键继续 . . .
```

A yellow box highlights the following instructions:

- \* 运行结果 😊
- \* 随便按下一个键，关闭运行窗口

# 一、Visual Studio 2010 命令行

\* 启动 vs2010

\* 开始菜单

\* 所有程序

\* 找到文件夹:

Microsoft Visual Studio 2010

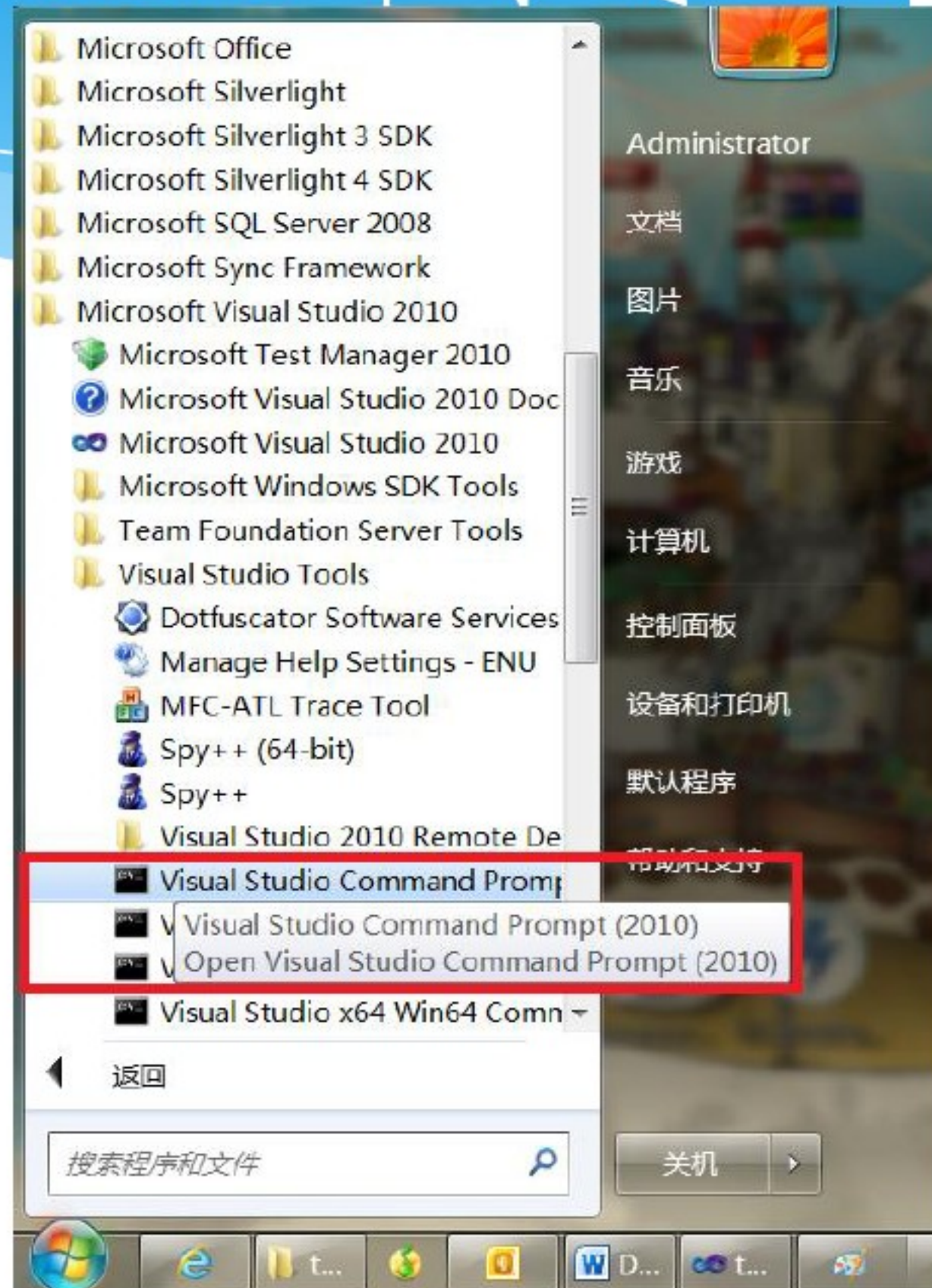
\* 找到文件夹:

Visual Studio Tools

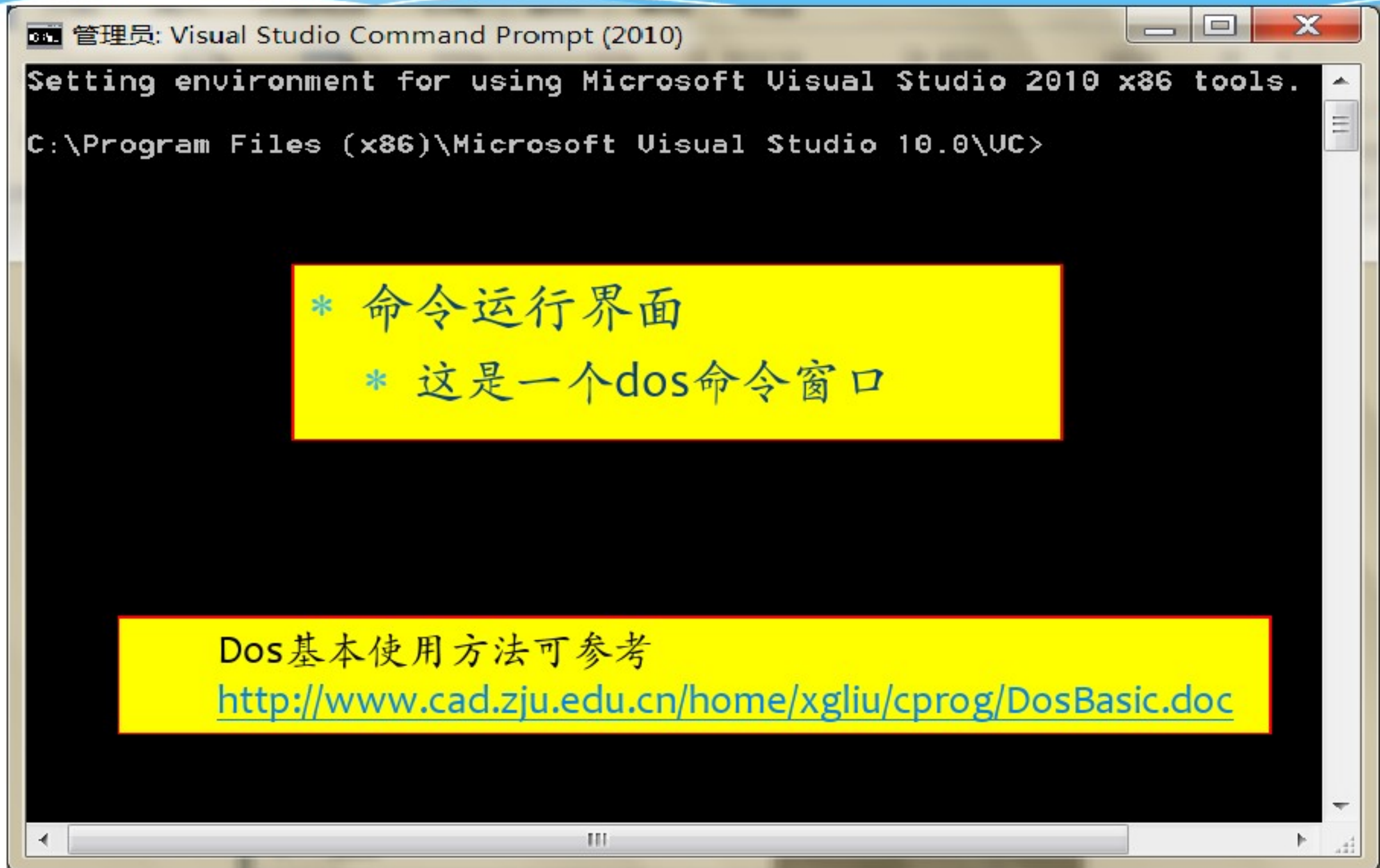
\* 找到命令

Visual Studio Command Prompt

\* 运行该命令



## 二、Visual Studio 2010 命令行



管理员: Visual Studio Command Prompt (2010)

```
Setting environment for using Microsoft Visual Studio 2010 x86 tools.  
C:\Program Files (x86)\Microsoft Visual Studio 10.0\UC>
```

- \* 命令运行界面
- \* 这是一个dos命令窗口

Dos基本使用方法可参考  
<http://www.cad.zju.edu.cn/home/xgliu/cprog/DosBasic.doc>

## 二、Visual Studio 2010 命令行

管理员: Visual Studio Command Prompt (2010)

Setting environment for using Microsoft Visual Studio 2010 x86 tools.

C:\Program Files (x86)\Microsoft Visual Studio 10.0\UC>cd \

C:\>cd myc

C:\myc>cd test

C:\myc\test>cd test

C:\myc\test\test>dir

驱动器 C 中的卷是 WIN7  
卷的序列号是 06AC-BD3E

C:\myc\test\test 的目录

|            |       |       |                      |
|------------|-------|-------|----------------------|
| 2013/09/09 | 10:45 | <DIR> | .                    |
| 2013/09/09 | 10:45 | <DIR> | ..                   |
| 2013/09/08 | 11:42 | 95    | main.c               |
| 2013/09/08 | 11:33 | 3,912 | test.ucxproj         |
| 2013/09/08 | 11:33 | 951   | test.ucxproj.filters |
| 2013/09/08 | 11:22 | 143   | test.ucxproj.user    |
|            |       | 4 个文件 | 5,101 字节             |
|            |       | 2 个目录 | 79,511,932,928 可用字节  |

C:\myc\test\test>

转到源程序main.c所在的目录

cd \ 或者cd c:\ (转到c盘根目录)

cd myc (转到目录myc)

cd test (转到子目录test)

cd test (转到子目录test)

dir (显示C:\myc\test\test中的文件)

看到源程序: main.c

## 二、Visual Studio 2010 命令行

```
管理员: Visual Studio Command Prompt (2010)

C:\myc\test\test>dir
驱动器 C 中的卷是 WIN7
卷的序列号是 06AC-BD3E

C:\myc\test\test 的目录

2013/09/09  10:45    <DIR>
2013/09/09  10:45    <DIR>
2013/09/08  11:42
2013/09/08  11:33
2013/09/08  11:33                951 test.ucxproj.filters
2013/09/08  11:22                143 test.ucxproj.user
                4 个文件             5,101 字节
                2 个目录      79,511,638,016 可用字节

C:\myc\test\test>cl main.c
Microsoft (R) 32-bit C/C++ Optimizing Compiler Version 16.00.40219.01 for 80x86
Copyright (C) Microsoft Corporation. All rights reserved.

main.c
Microsoft (R) Incremental Linker Version 10.00.40219.01
Copyright (C) Microsoft Corporation. All rights reserved.

/out:main.exe
main.obj

C:\myc\test\test>
```

运行visual studio的编译命令cl对源程序main.c进行编译链接生成执行文件main.exe

cl main.c

## 二、Visual Studio 2010 命令行

```
管理员: Visual Studio Command Prompt (2010)
卷的序列号是 06AC-BD3E

C:\myc\test\test 的目录

2013/09/09  10:45    <DIR>          .
2013/09/09  10:45    <DIR>          ..
2013/09/08  11:42             95 main.
2013/09/08  11:33        3,912 test.
2013/09/08  11:33         951 test.
2013/09/08  11:22         143 test.
               4 个文件             5,101 字节
               2 个目录 79,511,638,016 可用字节

C:\myc\test\test>cl main.c
Microsoft (R) 32-bit C/C++ Optimizing Compiler Version 16.00.40219.01 for 80x86
Copyright (C) Microsoft Corporation. All rights reserved.

main.c
Microsoft (R) Incremental Linker Version 10.00.40219.01
Copyright (C) Microsoft Corporation. All rights reserved.

/out:main.exe
main.obj

C:\myc\test\test>main
Hello World
Here I am

C:\myc\test\test>
```

运行visual studio的编译命令cl对源程序main.c进行编译链接生成执行文件main.exe

编译生成的结果

运行程序main.exe

程序的输出结果

## 二、Visual Studio 2010 命令行

- \* 如果用Visual Studio的命令行，那怎么生成main.c呢？
  - \* 可以用任何文本编辑软件编辑
    - \* 例如notepad, word编辑
    - \* 或者Visual Studio编辑