實驗項目-C 語言的條件運算

一、 本節目的：

- 學習開發 C 語言程式
- 實現在 Visual Studio 2017 系統設計平台上

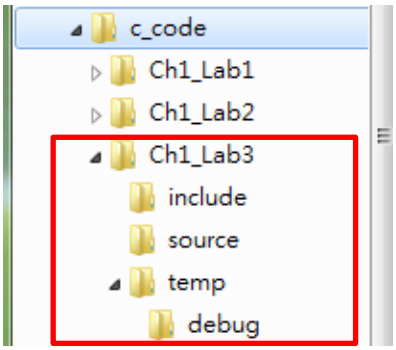
二、 設計重點：

- C 語言的條件式應用

三、 設計步驟：

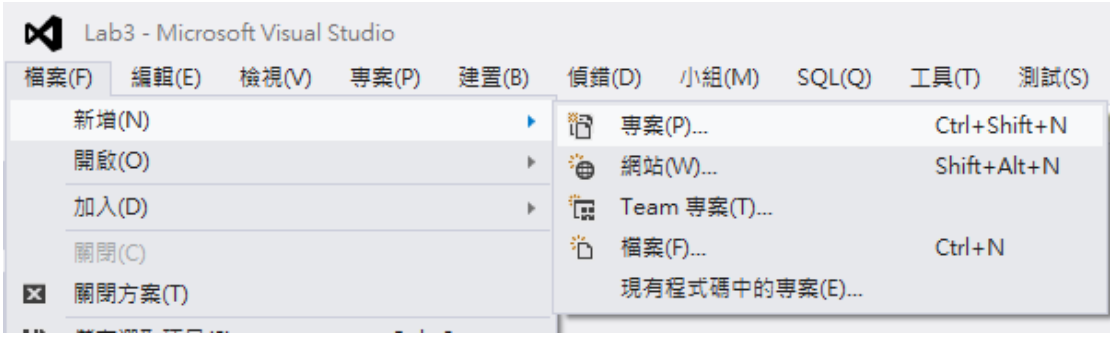
1. 建立新的空專案

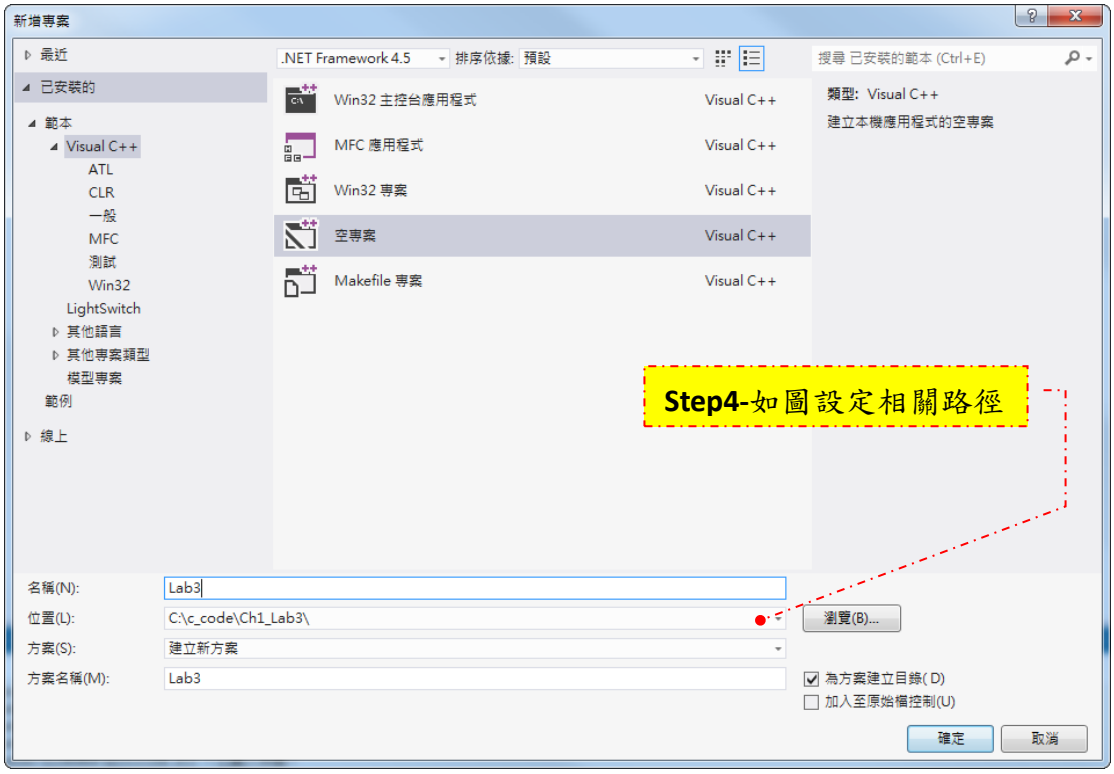
Step1-在 C:\c_code 資料夾內新增名為“Ch1_Lab3”的資料夾，再於 Ch1_Lab3 資料夾內分別建立 include、source、temp 等資料夾，建立後需要在 temp 資料夾內新增名為“debug”的資料夾，建立完成後如下圖



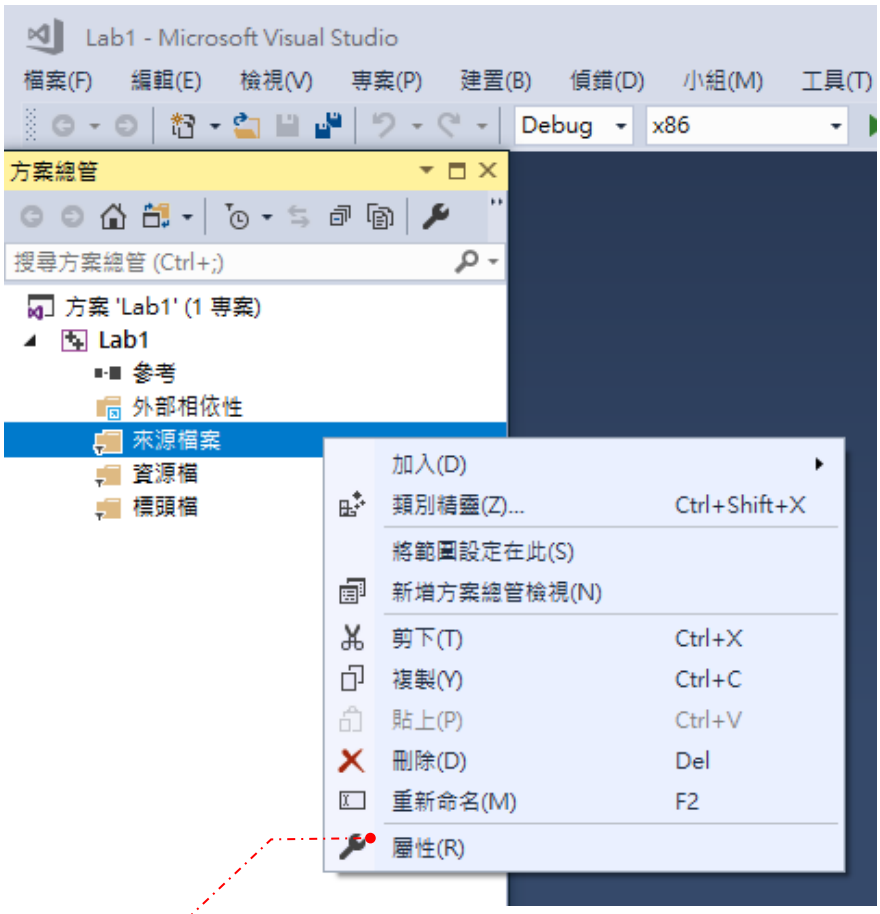
Step2-開啟 Microsoft Visual Studio 視窗畫面後點選左上角“開始(F)”

Step3-點選“新增(N)”再點選“專案(P)”



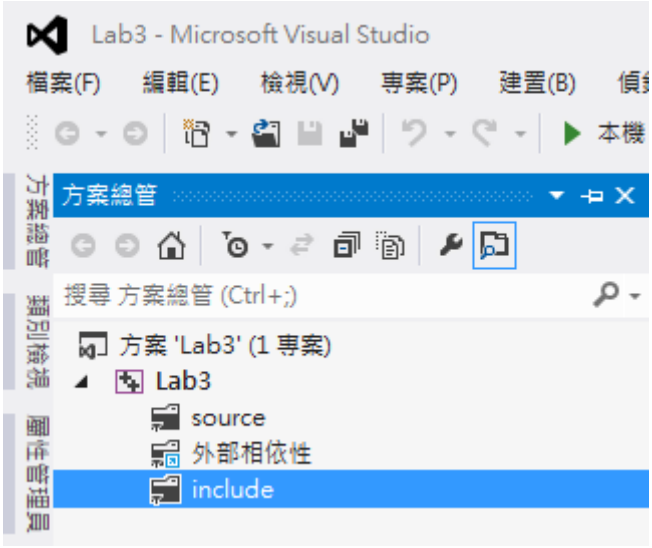

新增專案
最近
已安裝的
範本
Visual C++
ATL
CLR
一般
MFC
測試
Win32
LightSwitch
其他語言
其他專案類型
模型專案
範例
線上
.NET Framework 4.5
排序依據: 預設
Win32 主控台應用程式 Visual C++
MFC 應用程式 Visual C++
Win32 專案 Visual C++
空專案 Visual C++
Makefile 專案 Visual C++
搜尋 已安裝的範本 (Ctrl+E)
類型: Visual C++
建立本機應用程式的空專案
Step4-如圖設定相關路徑
名稱(N): Lab3
位置(L): C:\c_code\Ch1_Lab3\
瀏覽(B)...
方案(S): 建立新方案
方案名稱(M): Lab3
為方案建立目錄(D)
加入至原始檔控制(U)
確定
取消

2. 路徑設定、新增 .c 檔

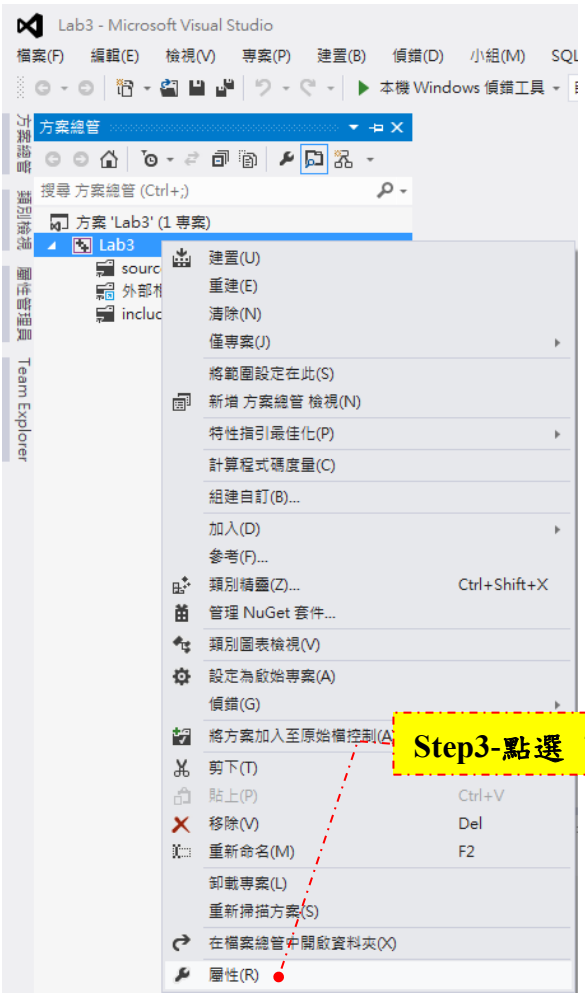


Step1-在左上角“方案總管”欄 Lab3 裡，“來源檔案”上按右鍵，選“重新命名(M)”,命名為“source”，再將“標頭檔”重新命名為“include”

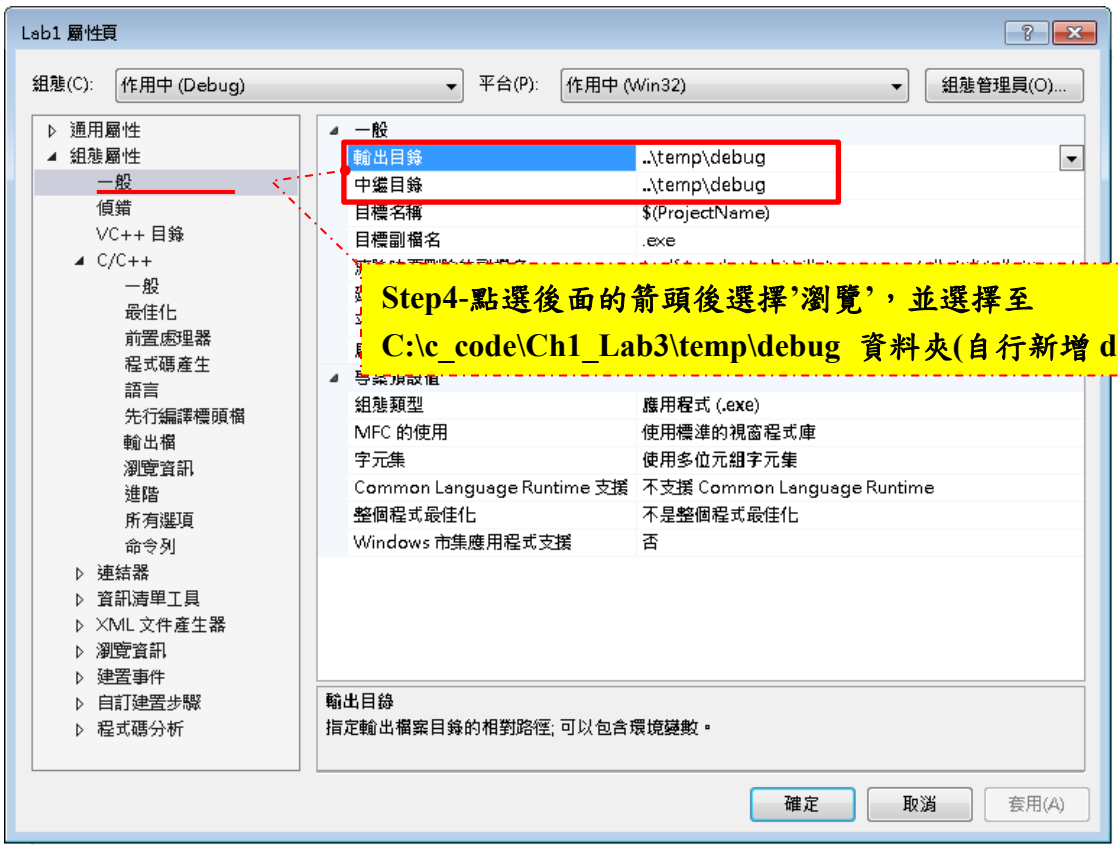
點選“資源檔”，按右鍵選“刪除(D)”，完成後方案總管如下圖



Step2-點選“source”上按右鍵，選“加入(D)”,再點選“新增項目(W)”，並在 C:\c_code\Ch1_Lab3\source 資料夾內，新增”Main.c”

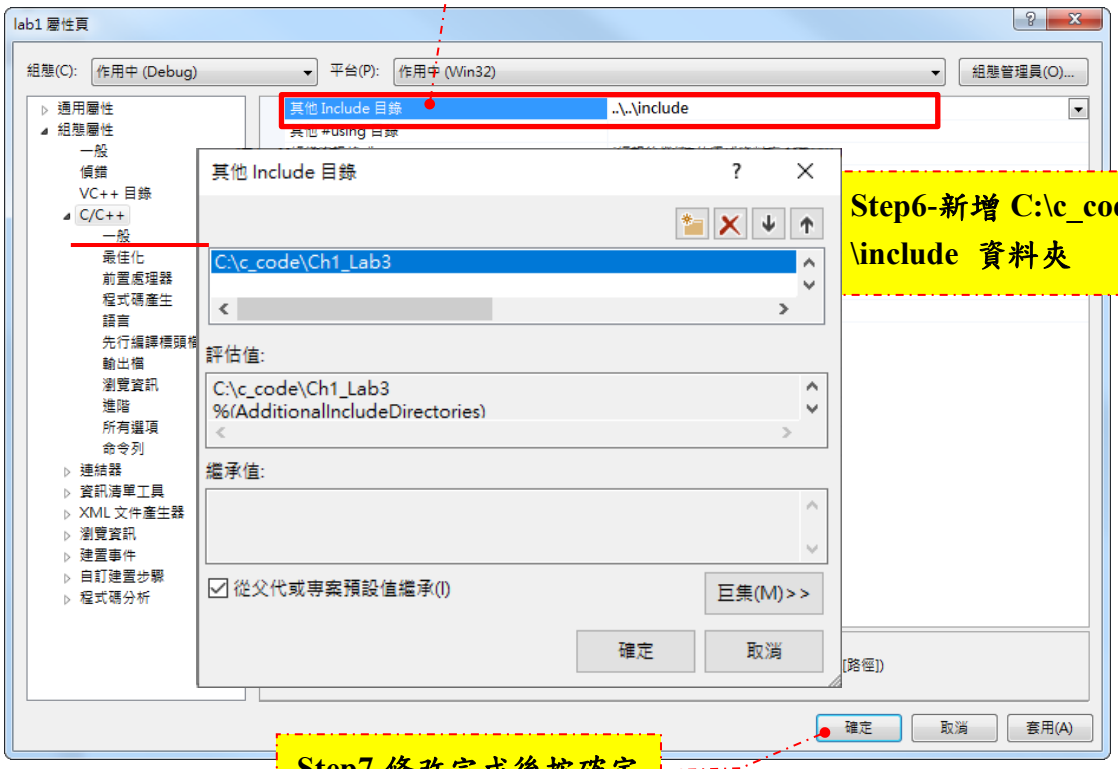


Step3-點選“Lab3”按右鍵“屬性(R)”



Step4-點選後面的箭頭後選擇'瀏覽'，並選擇至 C:\c_code\Ch1_Lab3\temp\debug 資料夾(自行新增 debug 資料夾)

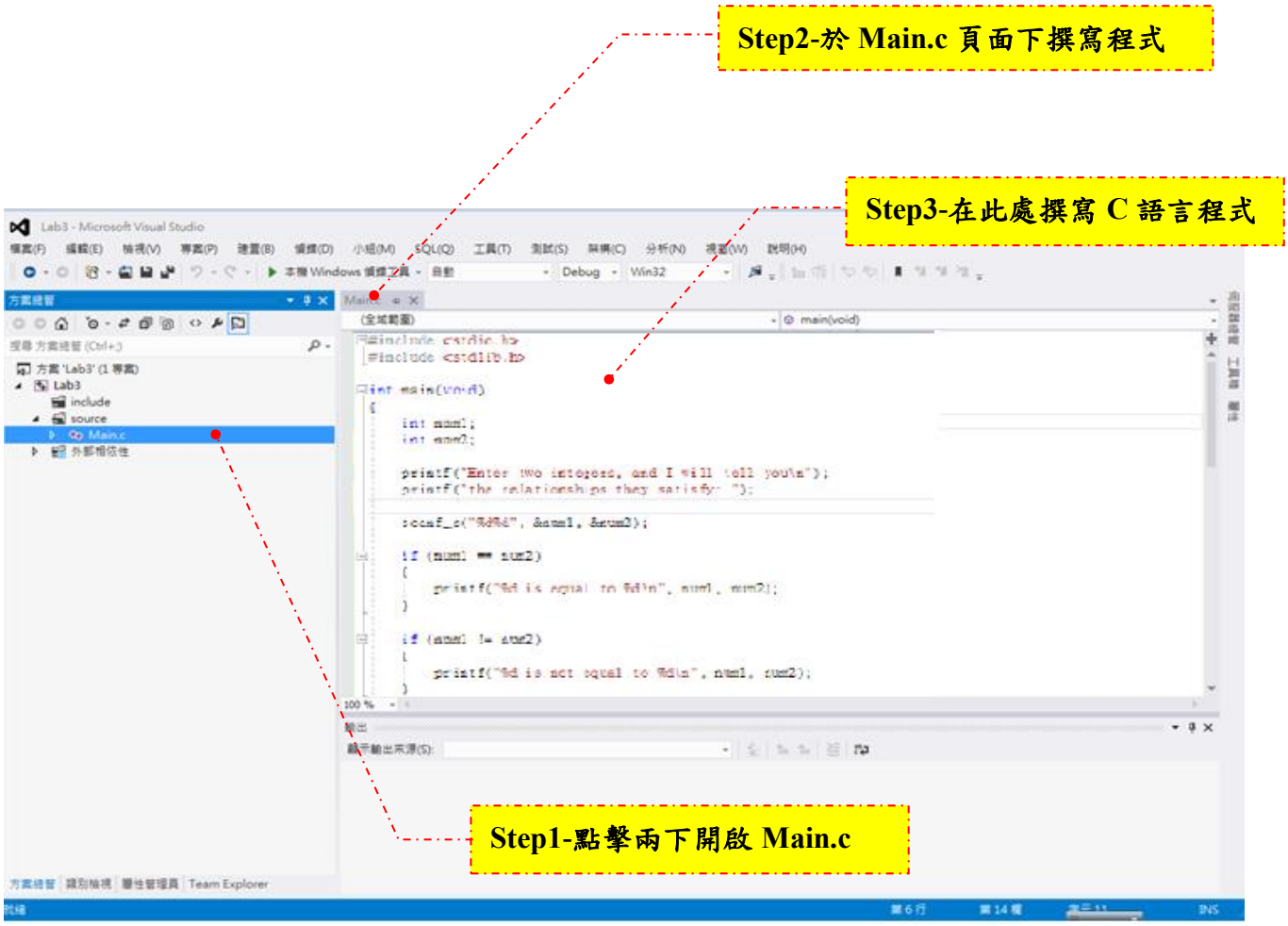
Step5-點選後面的箭頭選擇編輯



Step6-新增 C:\c_code\Ch1_Lab3\include 資料夾

Step7-修改完成後按確定

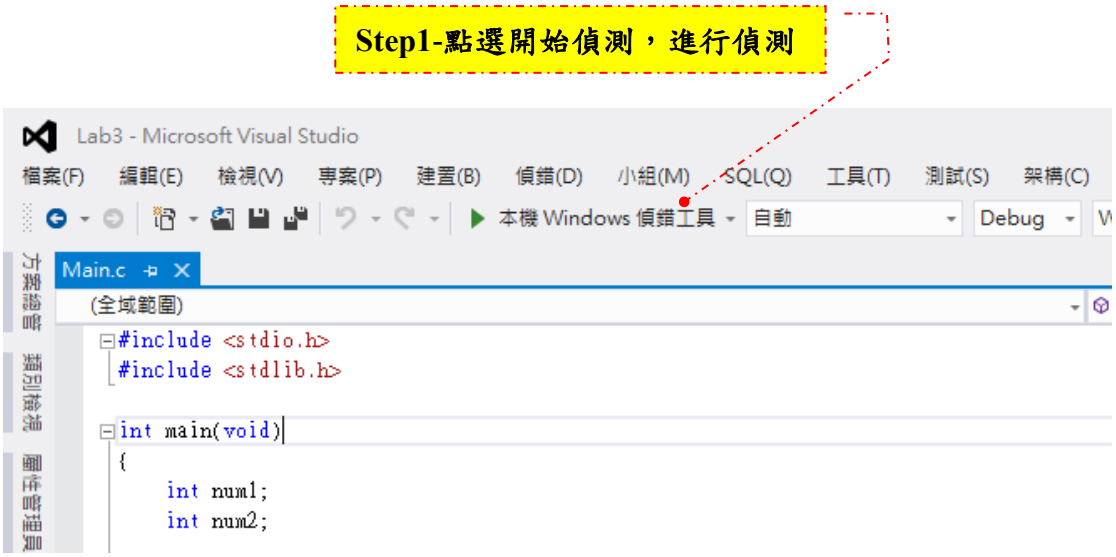
3. 撰寫 C 語言程式

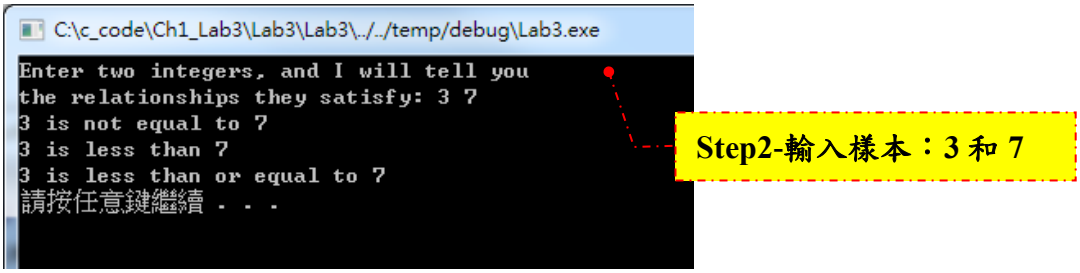


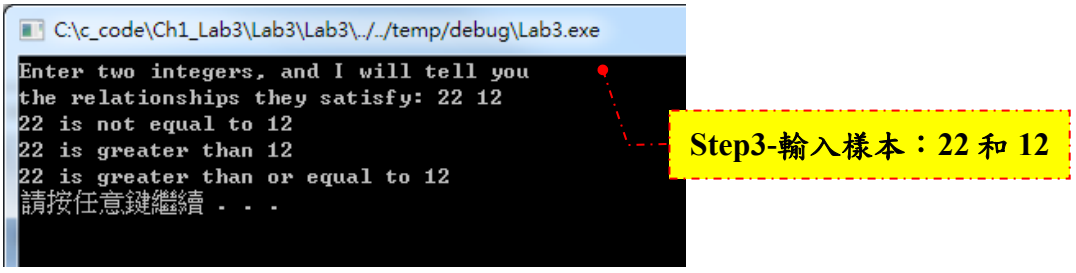
Main.c 程式碼：

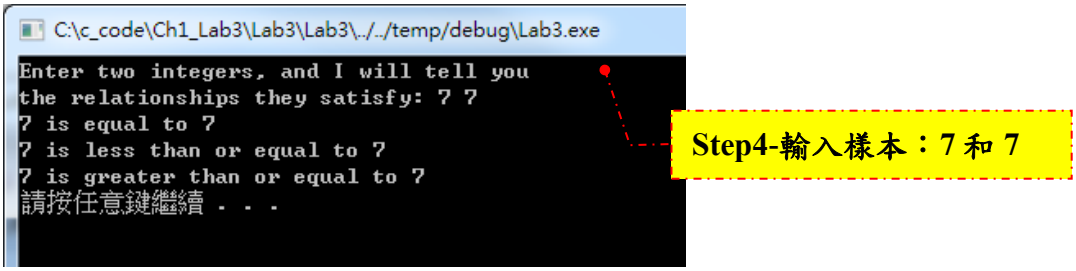
```c
#include <stdio.h>
#include <stdlib.h>

int main(void)
{
    int num1;
    int num2;

    printf("Enter two integers, and I will tell you\n");
    printf("the relationships they satisfy: ");

    scanf_s("%d%d", &num1, &num2);

    if (num1 == num2)
    {
        printf("%d is equal to %d\n", num1, num2);
    }

    if (num1 != num2)
    {
        printf("%d is not equal to %d\n", num1, num2);
    }
    if (num1 < num2)
    {
        printf("%d is less to %d\n", num1, num2);
    }

    if (num1 > num2)
    {
        printf("%d is greater to %d\n", num1, num2);
    }
    if (num1 <= num2)
    {
        printf("%d is less than or equal to %d\n", num1, num2);
    }

    if (num1 >= num2)
    {
        printf("%d is greater than or equal to %d\n", num1, num2);
    }

    system("pause");
    return 0;
}
```

4. 執行與測試程式結果


Step1-點選開始偵測，進行偵測
Lab3 - Microsoft Visual Studio
檔案(F) 編輯(E) 檢視(V) 專案(P) 建置(B) 偵錯(D) 小組(M) SQL(Q) 工具(T) 測試(S) 架構(C)
本機 Windows 偵錯工具
自動
Debug
Main.c
(全域範圍)
#include <stdio.h>
#include <stdlib.h>
int main(void)
{
int num1;
int num2;


C:\c_code\Ch1_Lab3\Lab3\Lab3\../../temp/debug\Lab3.exe
Enter two integers, and I will tell you
the relationships they satisfy: 3 7
3 is not equal to 7
3 is less than 7
3 is less than or equal to 7
請按任意鍵繼續 . . .
Step2-輸入樣本：3 和 7


C:\c_code\Ch1_Lab3\Lab3\Lab3\../../temp/debug\Lab3.exe
Enter two integers, and I will tell you
the relationships they satisfy: 22 12
22 is not equal to 12
22 is greater than 12
22 is greater than or equal to 12
請按任意鍵繼續 . . .
Step3-輸入樣本：22 和 12


C:\c_code\Ch1_Lab3\Lab3\Lab3\../../temp/debug\Lab3.exe
Enter two integers, and I will tell you
the relationships they satisfy: 7 7
7 is equal to 7
7 is less than or equal to 7
7 is greater than or equal to 7
請按任意鍵繼續 . . .
Step4-輸入樣本：7 和 7