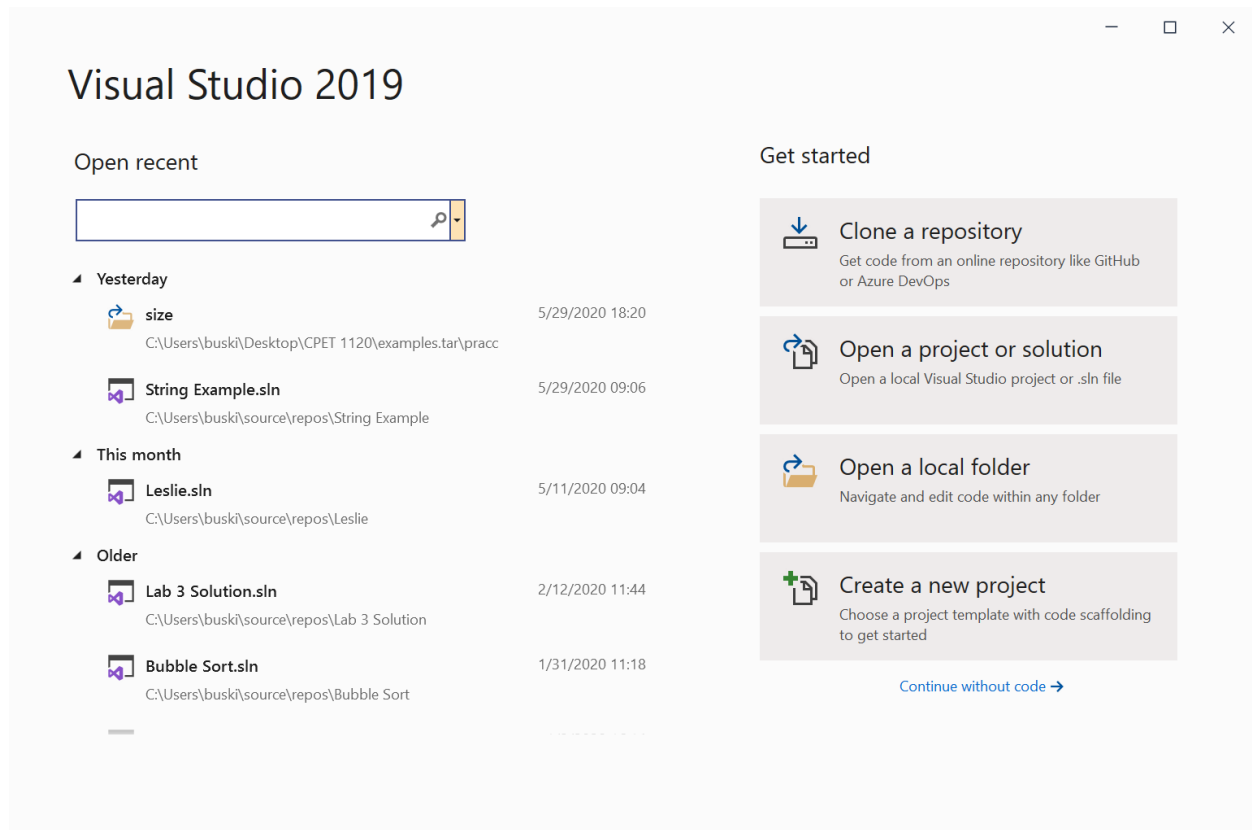
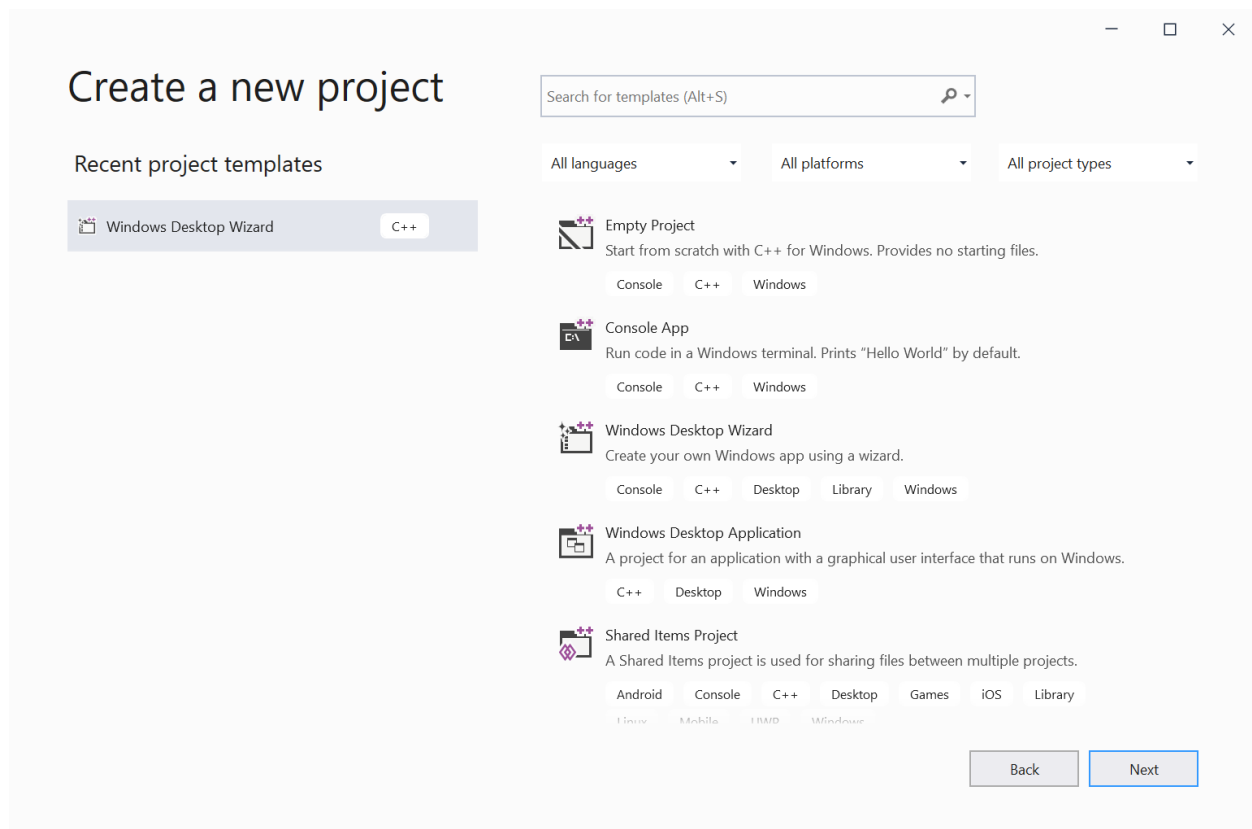


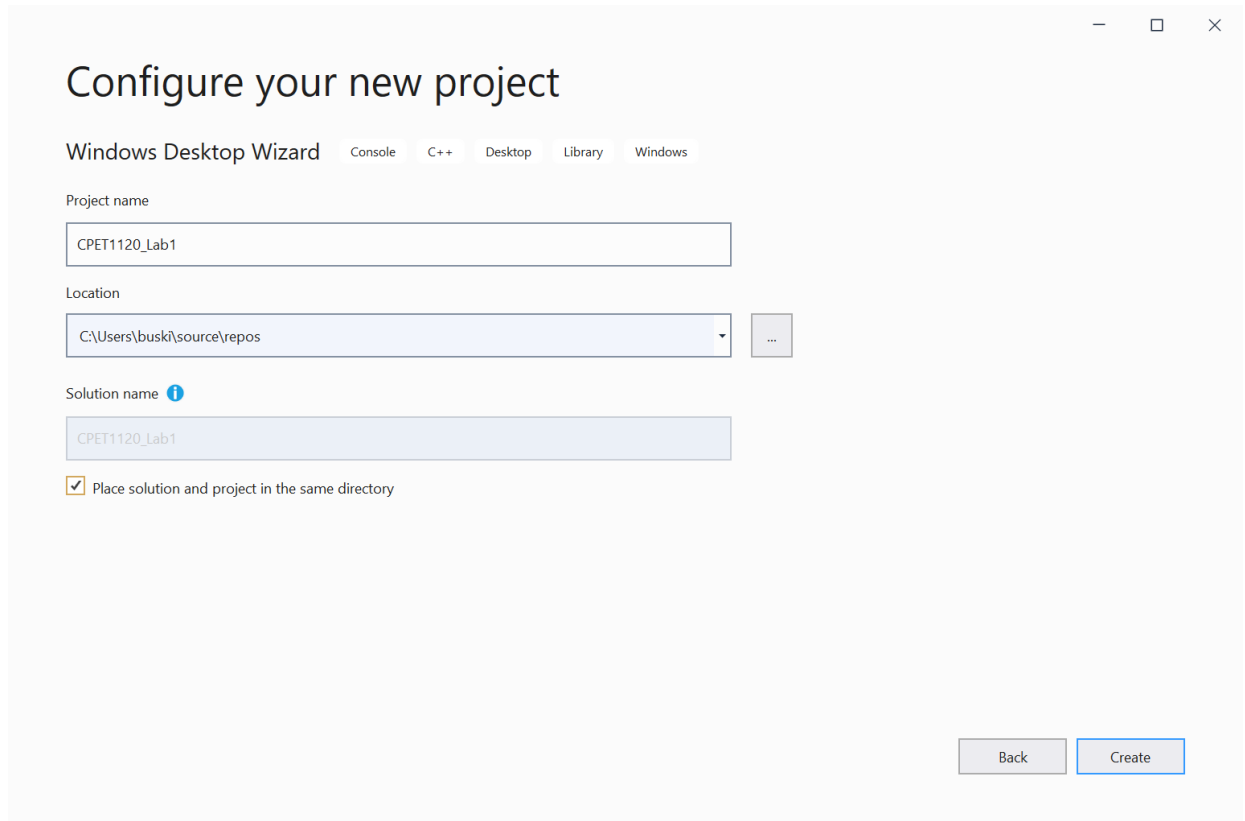
After clicking on the Visual Studio 2019 icon, the following window will be displayed. Now click on the "Create a new project" button on the bottom right of the window.



This button opens a new window as shown below. While in this window, click on the "Windows Desktop Wizard" button and then the Next button on the bottom of this window.

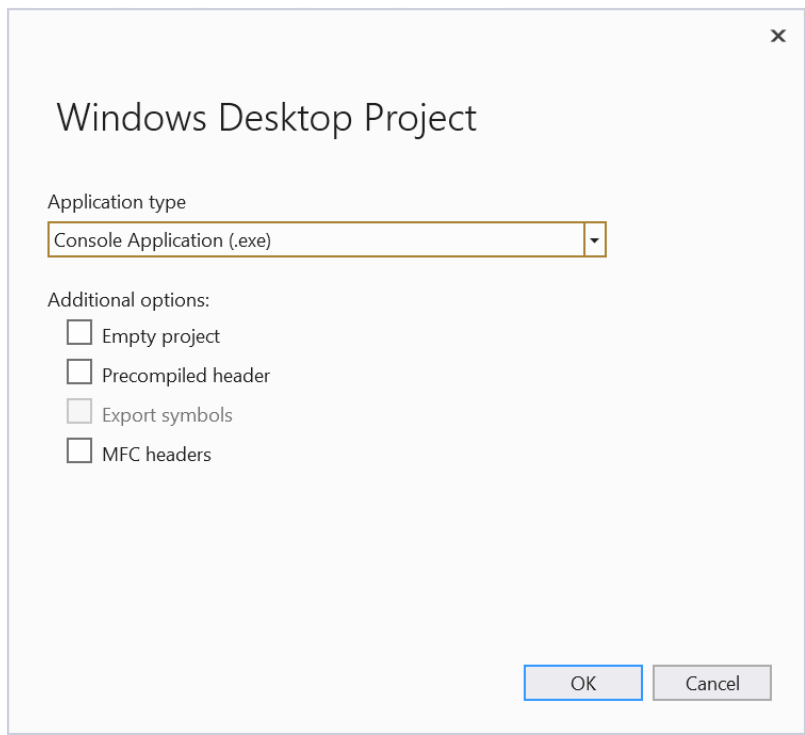


In this new window, give your project a name, such as CPET1120_Lab1, check the “Place solution and project in the same directory” box, and then click on the Create button at the bottom of the page.



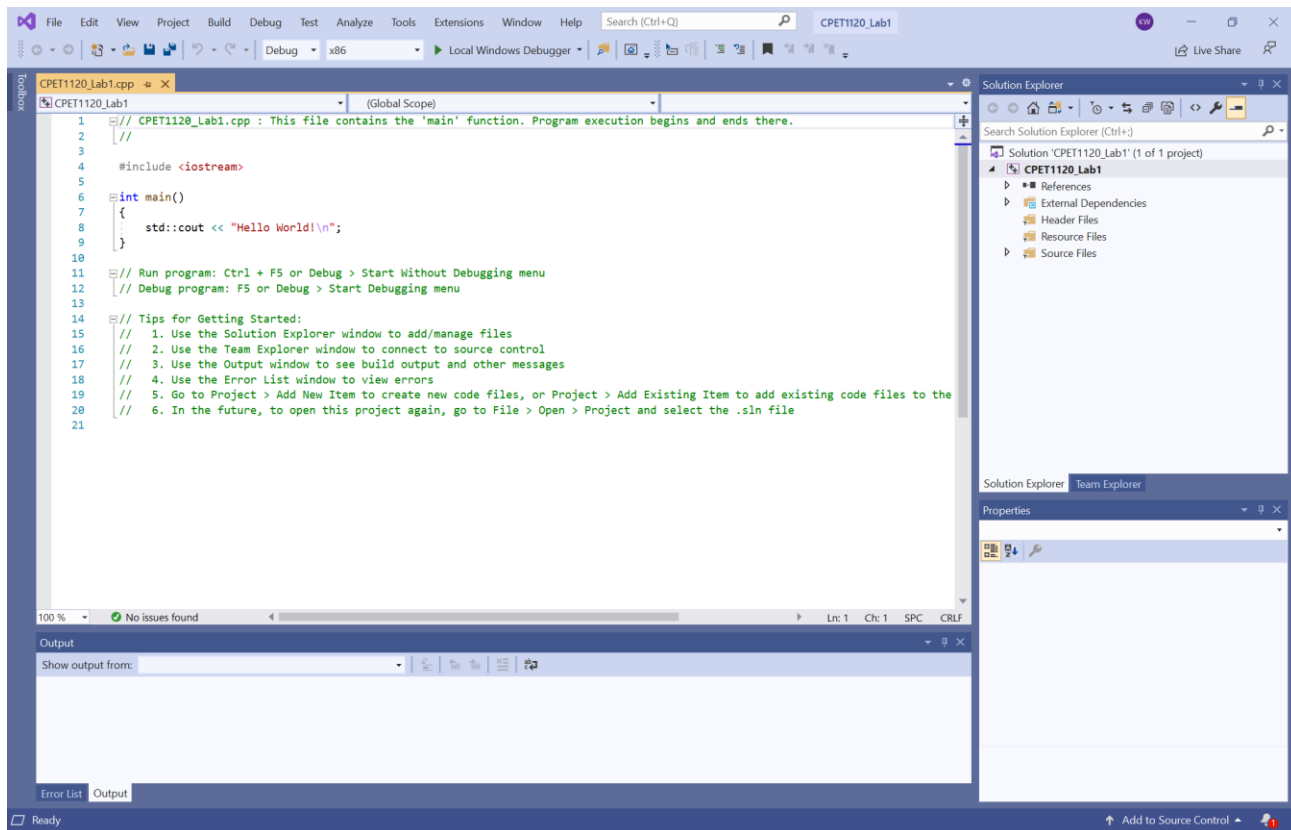
The screenshot shows the 'Configure your new project' dialog box. At the top, the title is 'Configure your new project'. Below the title, there are tabs: 'Windows Desktop Wizard' (selected), 'Console', 'C++', 'Desktop', 'Library', and 'Windows'. The 'Project name' field contains 'CPET1120_Lab1'. The 'Location' field shows 'C:\Users\busk\source\repos' with a dropdown arrow and a browse button (...). The 'Solution name' field, marked with an information icon (i), also contains 'CPET1120_Lab1'. Below these fields, there is a checkbox labeled 'Place solution and project in the same directory' which is checked. At the bottom right, there are 'Back' and 'Create' buttons.

This will open a new window above the current window. Make sure the application type is set to select “Console Application (.exe)”. Do not check any of the Additional options boxes in this window. Click on the OK button and this will take you to the Visual Studio IDE for C/C++.

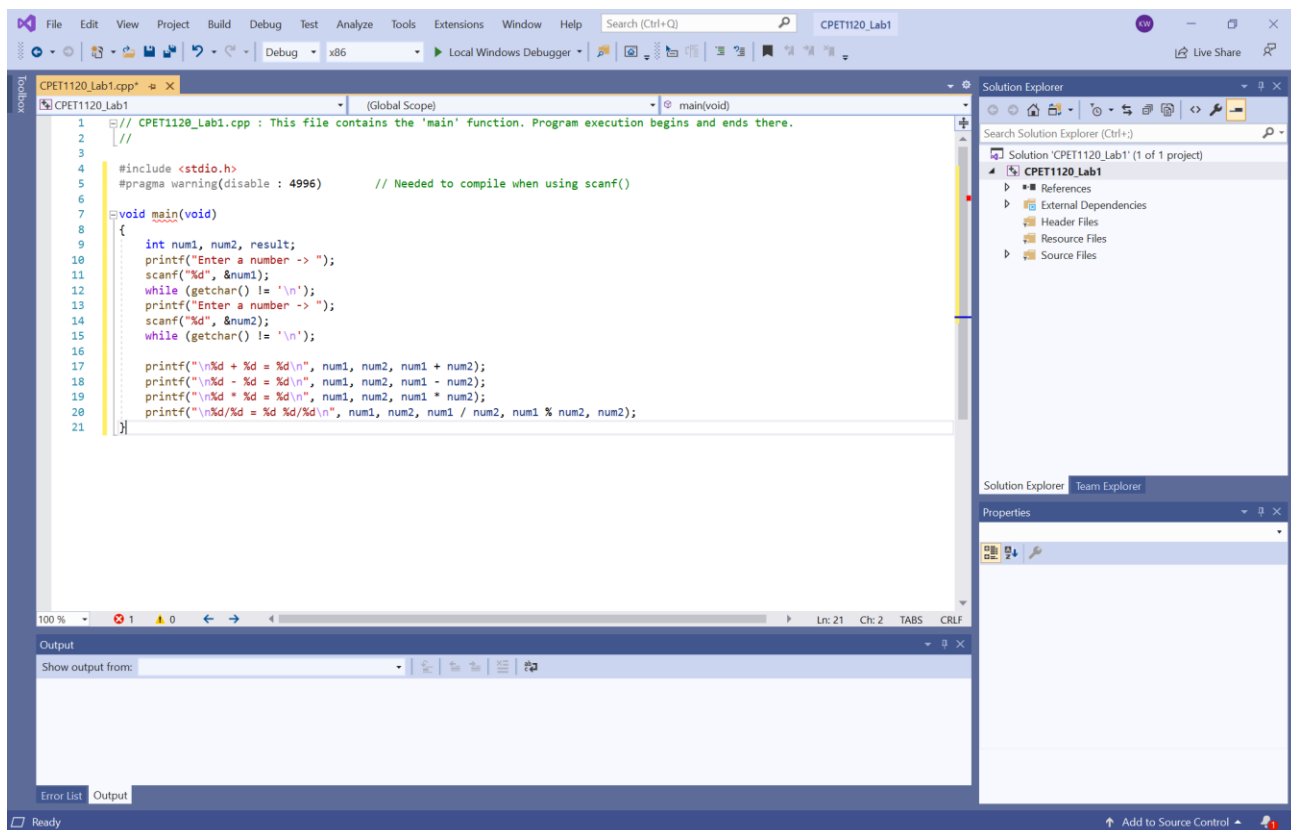


The screenshot shows the 'Windows Desktop Project' dialog box. The title is 'Windows Desktop Project'. Below the title, the 'Application type' dropdown menu is set to 'Console Application (.exe)'. Under the 'Additional options:' section, there are four unchecked checkboxes: 'Empty project', 'Precompiled header', 'Export symbols', and 'MFC headers'. At the bottom right, there are 'OK' and 'Cancel' buttons.

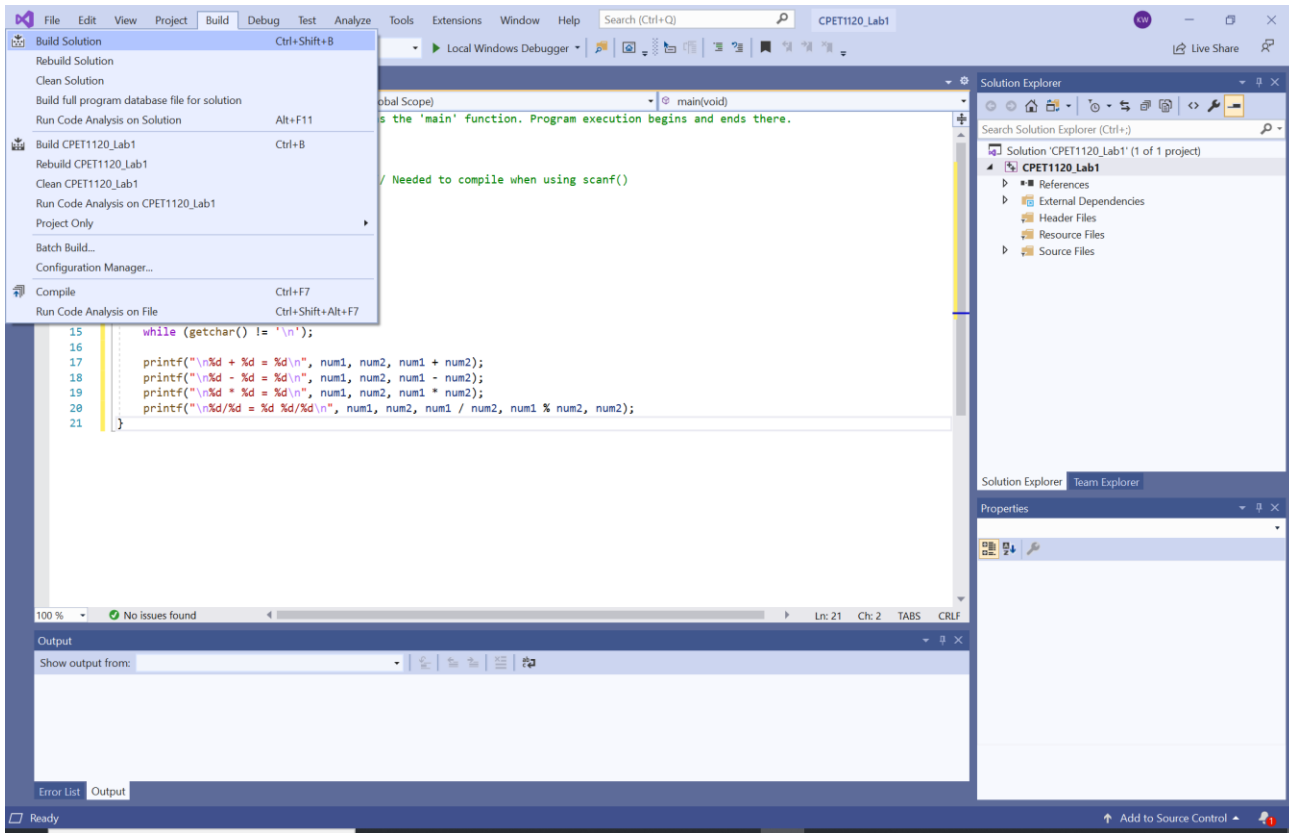
You are now ready to write your source code and then to compile it into an operational program. The new window on the left is the text editor where the source code is written.



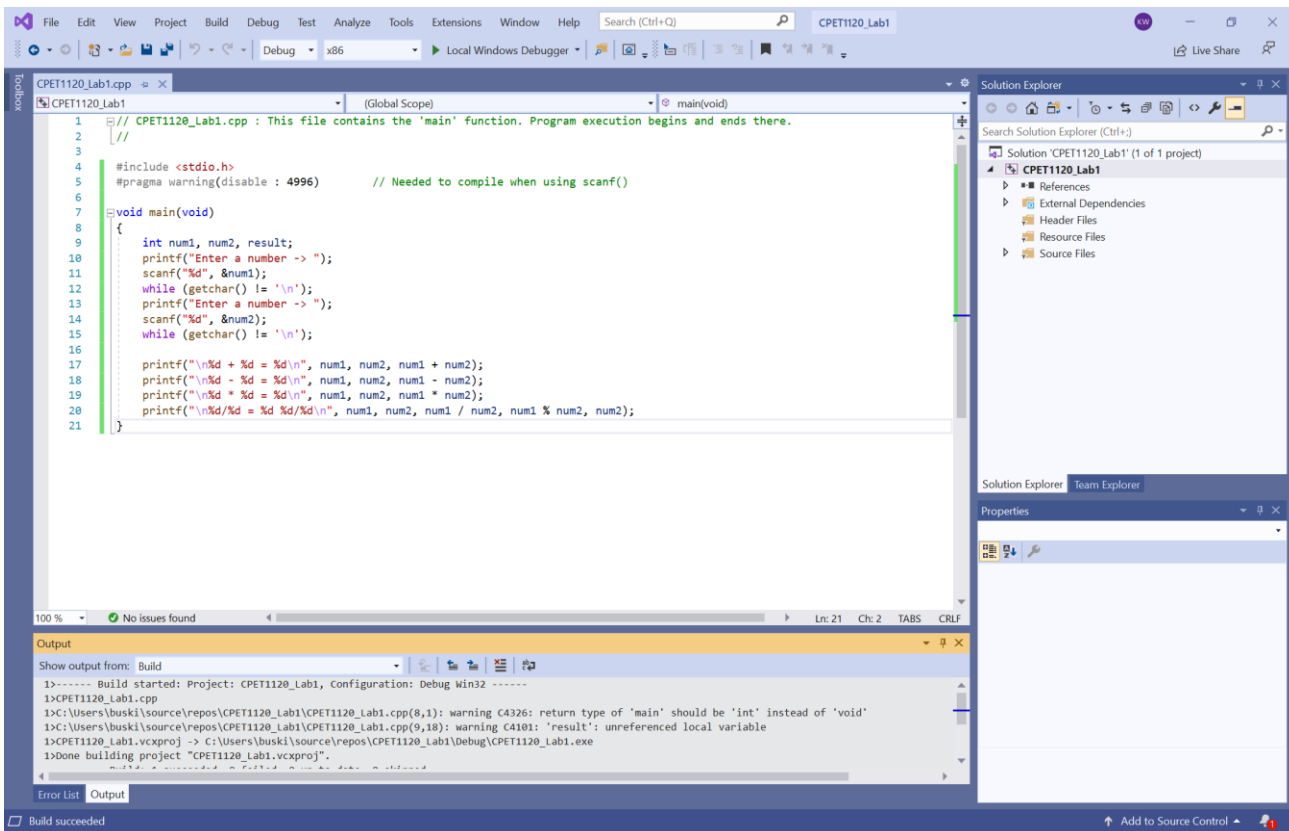
Delete lines 4-21. Open the source code file called "Your_First_Example.txt" using Notepad and paste its contents on line 4. The source code window should now look like the window below.



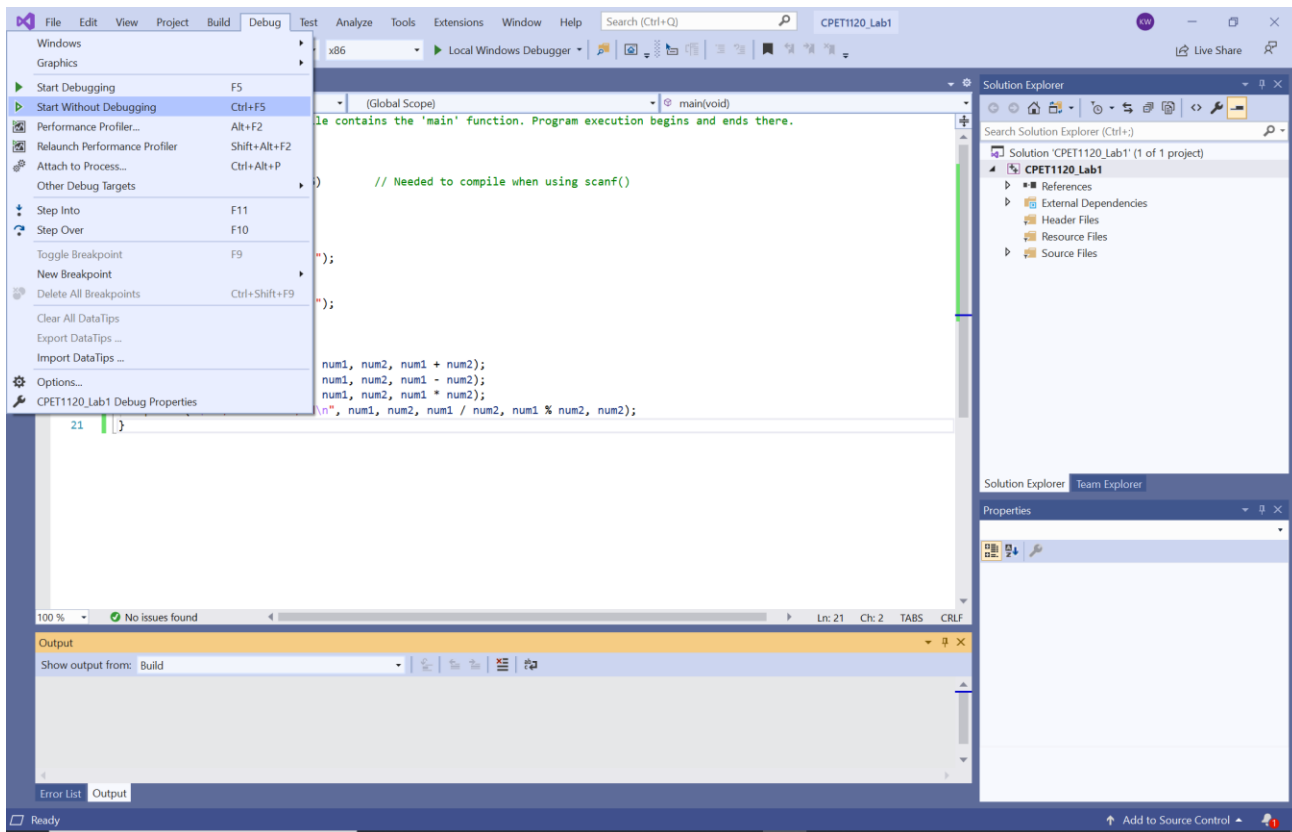
Click on the "Build" pull down menu and select "Build Solution".



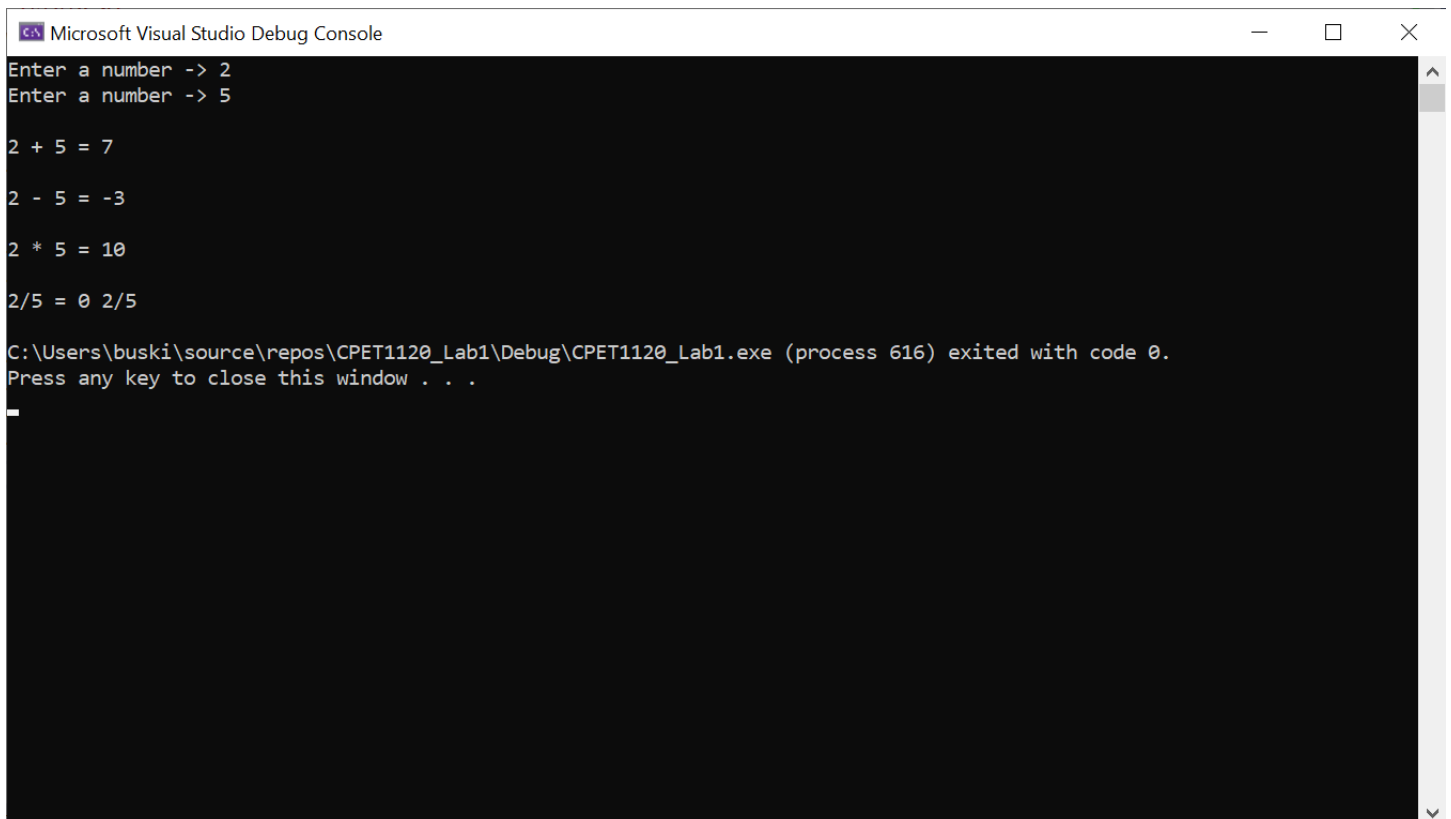
This selection will compile your program and will show details related to success, warnings, and errors in the Output window on the bottom of the screen. For this example, there were warnings, but no errors, so the program can be run.



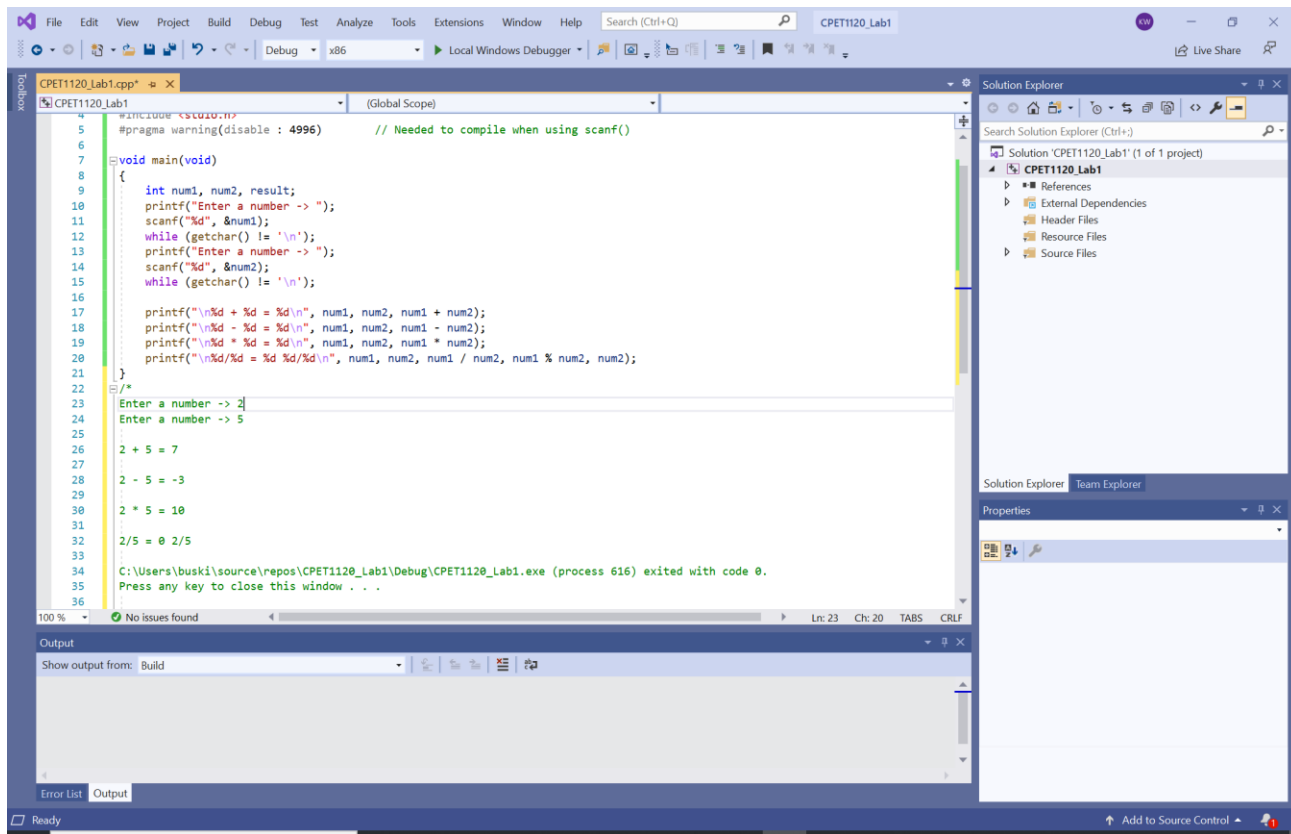
Now go to the "Debug" pull down menu and select "Start Without Debugging". This will run your compiled code in the DOS Console.



DOS Console window results after entering numbers 2 and 5 as shown below.



While in the DOS Console window, press the Ctrl + A keys and then the Ctrl + C keys. This will copy the DOS window contents to the clipboard to be pasted at the bottom of your Source Code window. You will need to type /* and it will finish with a */ - put this on line 22. Now paste the clipboard contents between the two * *. This text will be green which shows that it's a comment section. The source code and DOS Console output results can now be saved and turned in all in one file. To save this information, Open Notepad and copy this information into a new text file.



The screenshot shows the Visual Studio Code interface with a C++ file named CPET1120_Lab1.cpp. The code includes a main function that prompts the user for two numbers and performs arithmetic operations. The output window shows the results of these operations. The Solution Explorer on the right shows the project structure.

```
1  #include <stdio.h>
2  #pragma warning(disable : 4996) // Needed to compile when using scanf()
3
4  void main(void)
5  {
6      int num1, num2, result;
7      printf("Enter a number -> ");
8      scanf("%d", &num1);
9      while (getchar() != '\n');
10     printf("Enter a number -> ");
11     scanf("%d", &num2);
12     while (getchar() != '\n');
13
14     printf("\n%d + %d = %d\n", num1, num2, num1 + num2);
15     printf("\n%d - %d = %d\n", num1, num2, num1 - num2);
16     printf("\n%d * %d = %d\n", num1, num2, num1 * num2);
17     printf("\n%d / %d = %d %d/%d\n", num1, num2, num1 / num2, num1 % num2, num2);
18 }
19
20 /*
21 Enter a number -> 2
22 Enter a number -> 5
23
24 2 + 5 = 7
25
26 2 - 5 = -3
27
28 2 * 5 = 10
29
30 2/5 = 0 2/5
31
32 C:\Users\buski\source\repos\CPET1120_Lab1\Debug\CPET1120_Lab1.exe (process 616) exited with code 0.
33 Press any key to close this window . . .
34
35
36
```

You will use this process for every Lab that you complete and turn in. The Notepad text file must include both the Source Code and the DOS Console output data.