



Overview

Now that you have explored how to access Visual Studio and create a new project where you can write C++ code, it is time to expand your Visual Studio knowledge to include how to use two different programming languages at once. For this work, you will be integrating Python with C++. Since you have already learned the basics of Python coding in a previous course, you will be able to focus on the way the two languages work together and the different valuable tasks that each performs well.

Prompt

By the end of this activity, you will submit a screenshot of your functioning C++ and Python integration in Visual Studio. You will also include a brief write-up to explain the challenges you faced so that your instructor can help you through any complications now, before you encounter more in-depth coding work using both programming languages.

Specifically, you must address the following rubric criteria:

- **Prepare an integrated development environment to work with two programming languages.** Watch the [Module Two Setup Video](#) (or access its [transcript](#)) and review the [C++ and Python Visual Studio Guide](#) and the [Develop with C++ and Python on Apporto Tutorial](#) for detailed instructions on how to integrate Python and C++ in Visual Studio. Take particular note that any time you work with two languages in this course you will need to switch to Release mode, rather than Debug mode, in Visual Studio before you begin your work.
- During the setup process, you will be working with C++ and Python starter code that is provided to you in the C++ and Python Visual Studio Guide. A more detailed version of this code, along with an in-depth explanation, will be provided in a later module when you need it for your assignment. For now, it is important to know that the starter code allows you to communicate between Python and C++. In this activity, you will focus on changing just one component, as outlined in the C++ and Python Visual Studio Guide. Update the “Hello from Python!” code from the PrintMe function in Python to another statement of your choosing. Note that the printed statement must include your name. The affected code is reproduced below for reference:

```
import re
import string

def printsomething():
    print("Hello from Python!")
```

- Run your code and take a screenshot of the result shown in the console window. Successfully running the code should give you the following result:

```
Start 1
2
01592AE0
3
```

4

Hello from Python!

Note: The numeric value 01592AE0 is specific to the example provided in the C++ and Python Visual Studio Guide. Your own screen will include a number that reflects the file location you select during the setup. Also, the “Hello from Python!” text will be altered to a statement of your choosing that includes your name.

- **Discuss the process and challenges of setting up an IDE with two programming languages.** Reflect on the process you followed to complete this work. Did you encounter any areas where Visual Studio’s functionality is still proving challenging? Are there any challenges you were able to overcome? If so, what were the steps you took to accomplish this? Do you have any remaining questions about integrating Python and C++ in Visual Studio?

Guidelines for Submission

Submit your completed work as a Microsoft Word document that includes your screenshot along with your 150- to 200-word written explanation.

Module Two Setup Rubric

Criteria	Proficient (100%)	Needs Improvement (70%)	Not Evident (0%)	Value
PrintMe Function	Prepares an integrated development environment to work with two programming languages	Shows progress toward proficiency, but with errors or omissions; areas for improvement may include taking a screenshot without the altered function but with other components working as expected	Does not attempt criterion	50
Written Explanation	Discusses the process and challenges of setting up an IDE with two programming languages	Shows progress toward proficiency, but with errors or omissions; areas for improvement may include discussing steps taken to overcome challenges or clearly identifying the steps in their process	Does not attempt criterion	50
Total:				100%