# CS50's Introduction to Programming with Python

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## Adieu, Adieu



In <u>The Sound of Music (https://en.wikipedia.org/wiki/The\_Sound\_of\_Music\_(film))</u>, there's a song sung largely in English, <u>So Long, Farewell (https://www.youtube.com/watch?v=Qy9\_lfjQopU)</u>, with these <u>lyrics (https://www.lyrics.com/lyric/3998488/Julie+Andrews/So+Long%2C+Farewell)</u>, wherein "adieu" means "goodbye" in French:

Adieu, adieu, to yieu and yieu and yieu

Of course, the line isn't grammatically correct, since it would typically be written (with an Oxford comma (https://en.wikipedia.org/wiki/Serial\_comma)) as:

Adieu, adieu, to yieu, yieu, and yieu

To be fair, "yieu" isn't even a word; it just rhymes with "you"!

In a file called <code>adieu.py</code>, implement a program that prompts the user for names, one per line, until the user inputs control-d. Assume that the user will input at least one name. Then bid adieu to those names, separating two names with one <code>and</code>, three names with two commas and one <code>and</code>, and n names with n-1 commas and one <code>and</code>, as in the below:

```
Adieu, adieu, to Liesl
Adieu, adieu, to Liesl and Friedrich
Adieu, adieu, to Liesl, Friedrich, and Louisa
Adieu, adieu, to Liesl, Friedrich, Louisa, and Kurt
Adieu, adieu, to Liesl, Friedrich, Louisa, Kurt, and Brigitta
Adieu, adieu, to Liesl, Friedrich, Louisa, Kurt, Brigitta, and Marta
Adieu, adieu, to Liesl, Friedrich, Louisa, Kurt, Brigitta, Marta, and Gretl
```

#### **▼** Hints

Note that the inflect module comes with quite a few methods, per pypi.org/project/inflect (https://pypi.org/project/inflect/). You can install it with:

```
pip install inflect
```

#### Demo

```
$ python adieu.py
Name: Liesl
Name:
Adieu, adieu, to Liesl
$ python adieu.py
Name: Liesl
Name: Friedrich
Name:
Adieu, adieu, to Liesl and Friedrich
$
```

Recorded with asciinema

### **Before You Begin**

Log into <u>cs50.dev</u> (https://cs50.dev/), click on your terminal window, and execute cd by itself. You should find that your terminal window's prompt resembles the below:

\$

Next execute

mkdir adieu

to make a folder called adieu in your codespace.

Then execute

cd adieu

to change directories into that folder. You should now see your terminal prompt as adieu/\$. You can now execute

code adieu.py

to make a file called adieu.py where you'll write your program.

### **How to Test**

Here's how to test your code manually:

Run your program with python adieu.py . Type Lies1 and press Enter, followed by control-d. Your program should output:

Adieu, adieu, to Liesl

Run your program with python adieu.py . Type Lies1 and press Enter, then type Friedrich and press Enter, followed by control-d. Your program should output:

Adieu, adieu, to Liesl and Friedrich

Run your program with python adieu.py. Type Lies1 and press Enter, then type Friedrich and press Enter. Now type Louisa and press Enter, followed by control-d. Your program should output:

Adieu, adieu, to Liesl, Friedrich, and Louisa

You can execute the below to check your code using check50, a program that CS50 will use to test your code when you submit. But be sure to test it yourself as well!

check50 cs50/problems/2022/python/adieu

Green smilies mean your program has passed a test! Red frownies will indicate your program output something unexpected. Visit the URL that check50 outputs to see the input check50 handed to your program, what output it expected, and what output your program actually gave.

### **How to Submit**

In your terminal, execute the below to submit your work.

submit50 cs50/problems/2022/python/adieu