

# CS50's Introduction to Programming with Python

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## Adieu, Adieu



In [The Sound of Music](https://en.wikipedia.org/wiki/The_Sound_of_Music_(film)) ([https://en.wikipedia.org/wiki/The\\_Sound\\_of\\_Music\\_\(film\)](https://en.wikipedia.org/wiki/The_Sound_of_Music_(film))), there's a song sung largely in English, [So Long, Farewell](https://www.youtube.com/watch?v=Qy9_lfjQopU) ([https://www.youtube.com/watch?v=Qy9\\_lfjQopU](https://www.youtube.com/watch?v=Qy9_lfjQopU)), with these [lyrics](https://www.lyrics.com/lyric/3998488/Julie+Andrews/So+Long%2C+Farewell) (<https://www.lyrics.com/lyric/3998488/Julie+Andrews/So+Long%2C+Farewell>), 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) ([https://en.wikipedia.org/wiki/Serial\\_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 `adieu.py`, 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 `and`, three names with two commas and one `and`, and  $n$  names with  $n - 1$  commas and one `and`, 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

## 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
$ python adieu.py
Name: Liesl
Name: Fri
```

Recorded with [asciinema](#)

## Before You Begin

Log into [cs50.dev](https://cs50.dev) (<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 `Liesl` and press Enter, followed by control-d. Your program should output:

```
Adieu, adieu, to Liesl
```

- Run your program with `python adieu.py`. Type `Liesl` 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 `Liesl` 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

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

```
submit50 cs50/problems/2022/python/adieu
```