

day12 lists  
Due Friday 9/15/23

Create a new repl called "day12 lists". Put your name and the date in the top as a comment.

## 1. A list of strings

Print a blank line.

Print "Part 1:"

Create a list of strings with four or more entries. You can do words, animals, video games, sports, sports teams, planets, whatever you want. **Look at the slide deck from today if you need help.**

Print the list.

Sort the list.

Print the list now that you sorted it.

Print a single one of the items in the list in a sentence. For example, let's say I was doing planets, I might print this:

```
I would love to someday visit Mars
```

The line I might use to do this could look like this:

```
print("I would love to someday visit",planets[3])
```

(That's assuming that I had a list of planets and that "Mars" was the entry at index 3; what you have will be different from my examples.)

Add another String to your list using the `.append` method.

Print the list again. You should see the new item at the end.

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## 2. A list of integers

Print a blank line.

Print "Part 2:"

Create a new list full of integers in a random order (that is, not in normal increasing order.)

Print the list.

Sort the list.

Print the sorted list.

Count how many times your age occurs in the list using the `.count()` method. Report your results.

Add your age to the list using the `.append` function. Print the list again.

Check again how many times your age appears in the list. Make sure the results are correct.

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### 3. A list of stuff

Print a blank line.

Print "Part 3:"

Print a message saying that you're going to ask the user to create their own list of things to keep track of.

Create an empty list called stuff.

Create a while True: loop.

In the loop, ask the user to enter something to add to the list. If the user enters nothing, break out of the loop.

If the user did not enter nothing, add what they entered to the list. Don't add their empty entry to the list.

Print the length of the list, then repeat in the while True loop. Don't print the whole list out each time through, just print how many items are in it.

Once out of the while True: loop, print the entire list.

Sort the list.

Print the sorted list. Make sure the items seem sorted.

That's it!

Save output of your fully functioning program after your code in triple quotes. In your testing code, type in at least three items for the stuff list.

Turn in your repl for this when you are done.

See the next page for sample output (please do not use my entries for your project, make up your own lists, thanks.)

Sample output:

Part 1:

```
['hot', 'cold', 'wet', 'dry', 'cloudy', 'rainy']
['cloudy', 'cold', 'dry', 'hot', 'rainy', 'wet']
I hope today is not as hot as yesterday
['cloudy', 'cold', 'dry', 'hot', 'rainy', 'wet', 'smoky']
```

Part 2:

```
[9, 3, 2, 4, 6, 45, 21, 112, 9, 634, 879, -76]
[-76, 2, 3, 4, 6, 9, 9, 21, 45, 112, 634, 879]
My age, 58, shows up in the list 0 times.
[-76, 2, 3, 4, 6, 9, 9, 21, 45, 112, 634, 879, 58]
My age, 58, shows up in the list 1 times.
```

Part 3:

```
We're going to make a list of things you want to keep track of.
Enter nothing when you are done.
Please enter an item to add to the list: pizza
1 items now in your list.
Please enter an item to add to the list: ice cream
2 items now in your list.
Please enter an item to add to the list: bananas
3 items now in your list.
Please enter an item to add to the list: apples
4 items now in your list.
Please enter an item to add to the list: strawberries
5 items now in your list.
Please enter an item to add to the list:
Your list: ['pizza', 'ice cream', 'bananas', 'apples', 'strawberries']
Sorted:    ['apples', 'bananas', 'ice cream', 'pizza', 'strawberries']
```