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Lesson 3: Working with Lists

1. Create a list of 5 of your favorite tv shows.

```
tvshows=['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']
```

2. Print the list in its original order.

```
tvshows=['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']  
print(tvshows)  
['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']
```

3. Use the sorted() function to print the list in alphabetical order. How is sorted() different from sort()?

The difference between sorted() and sort() is that, when we use sorted() it sorts the list temporarily. Whereas, when we use sort(), it sorts the list permanently.

Printing the list using the sorted function:

```
tvshows=['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']  
print(tvshows)  
print(sorted(tvshows))  
['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']  
['Friends', 'game of thrones', 'star trek', 'stranger things', 'transformers']
```

4. Print out your original list.

```
tvshows=['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']  
print(tvshows)  
['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']
```

5. Used sorted() to print your list in reverse alphabetical order.

```
tvshows=['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']  
tvshows.sort(reverse=True)  
print(tvshows)
```

6. ['transformers', 'stranger things', 'star trek', 'game of thrones', 'Friends']

7. Create a message indicating how many favorite TV shows you have – use the len() function.

```
▶ tvshows=['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']  
print(tvshows)  
  
print(" I have " +str(len(tvshows)) +" favorite tv shows")  
☐ ['star trek', 'game of thrones', 'stranger things', 'transformers', 'Friends']  
I have 5 favorite tv shows
```