**Python List sort()**

The list's sort() method sorts the elements of a list.

**Example**

prime\_numbers = [11, 3, 7, 5, 2]

# sort the list in ascending order

prime\_numbers.sort()

print(prime\_numbers)

# Output: [2, 3, 5, 7, 11]

[Run Code](https://www.programiz.com/python-programming/online-compiler)

**sort() Syntax**

numbers.sort(reverse, key)

The sort() method can take two optional keyword arguments:

* **reverse** - By default False. If True is passed, the list is sorted in descending order.
* **key** - Comparion is based on this function.

**Sort in Descending order**

We can sort a list in descending order by setting reverse to True.

numbers = [7, 3, 11, 2, 5]

# reverse is set to True

numbers.sort(reverse = True)

print(numbers)

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**Output**

[11, 7, 5, 3, 2]

**Sort a List of Strings**

The sort() method sorts a list of strings in dictionary order.

cities = ["Tokyo", "London", "Washington D.C"]

# sort in dictionary order

cities.sort()

print(f"Dictionary order: {cities}")

# sort in reverse dictionary order

cities.sort(reverse = True)

print(f"Reverse dictionary order: {cities}")

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**Output**

Dictionary order: ['London', 'Tokyo', 'Washington D.C']

Reverse dictionary order: ['Washington D.C', 'Tokyo', 'London']

**Reverse Strings Based on Length**

The sort() method can sort items based on a function. For example,

text = ["abc", "wxyz", "gh", "a"]

# stort strings based on their length

text.sort(key = len)

print(text)

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**Output**

['a', 'gh', 'abc', 'wxyz']

len is a built-in function that returns the length of a string.

Since we passed the len function as key, the strings are sorted based on their length.

Before we wrap up, let’s put your knowledge of Python list sort() to the test! Can you solve the following challenge?

Challenge:

Write a function to sort a list of strings by their length.

* For Example, for input['apple', 'cherry', 'date'], the output should be ['date', 'apple', 'cherry']

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def sort\_by\_length(lst):