

Python

List Data Types

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Lesson 14

List

```
fruits = ['banana', 'apple', 'cherry']  
print(fruits)
```

```
numbers = [34, 56, -456, 7.56, - 2.34]  
print(numbers[1])
```

List

Negative indexing

```
numbers = [34, 56, -456, 7.56, - 2.34]  
print(numbers[-1])
```

List

```
fruits = ['banana', 'apple', 'cherry', 'kiwi']  
    print(fruits[1:3])  
    print(fruits[:3])  
    print(fruits[1:])  
    print(fruits[-3:-1])
```

List

Change item Value

```
fruits = ['banana', 'apple', 'cherry']  
fruits[1] = 'kiwi'  
print(fruits)
```

List

len()

```
fruits = ['banana', 'apple', 'cherry']
```

```
print(len(fruits))
```

List

append()

```
fruits = ['banana', 'apple', 'cherry']  
fruits.append('orange')  
print(fruits)
```

List

insert()

```
fruits = ['banana', 'apple', 'cherry']  
fruits.insert(1, 'orange')  
print(fruits)
```


List

remove()

```
fruits = ['banana', 'apple', 'cherry']  
fruits.remove('apple')  
print(fruits)
```

List

pop()

```
fruits = ['banana', 'apple', 'cherry']  
fruits.pop()  
print(fruits)
```

List

del

```
fruits = ['banana', 'apple', 'cherry']  
del fruits[2]  
del fruits  
print(fruits)
```

List

extend()

```
fruits = ['banana', 'apple', 'cherry']  
numbers = [34, 56, -456, 7.56, - 2.34]  
fruits.extend(numbers)  
print(fruits)
```

List

sort()

```
numbers= [34, 56 , -456, 7.56, - 2.34]  
numbers.sort()  
print(numbers)
```

List

reverse()

```
numbers [34, 56 , -456, 7.56, - 2.34]  
numbers.reverse()  
print(numbers)
```

List

Equality vs Similarity

```
list1 = [1, "Text", (5.6, 7.7)]  
list2 = [1, "Text", (5.6, 7.7)]  
print(list1 == list2)           # True  
print(list1 is list2)           # False
```

List Methods

Python has a set of built-in methods that you can use on lists.

Method	Description
<code>append()</code>	Adds an element at the end of the list
<code>clear()</code>	Removes all the elements from the list
<code>copy()</code>	Returns a copy of the list
<code>count()</code>	Returns the number of elements with the specified value
<code>extend()</code>	Add the elements of a list (or any iterable), to the end of the current list
<code>index()</code>	Returns the index of the first element with the specified value
<code>insert()</code>	Adds an element at the specified position
<code>pop()</code>	Removes the element at the specified position
<code>remove()</code>	Removes the item with the specified value
<code>reverse()</code>	Reverses the order of the list
<code>sort()</code>	Sorts the list

List

1. Write a Python Program to sum all the items in a List

List

2. Write a Python program to multiply all the items in a list.

List

3. Write a Python program to get the largest text from a list.

List

4. Write a Python program that have two lists and returns True if they have at least one common member.