Unit 4 - Lesson 6 - List Methods

About this unit

List Methods

List Methods

Unit • 100% completed

List Methods - Python

Assessment

List Methods

About this unit

List Methods

Overview of List methods

Question

Overview of List methods

Question

Write a program to reverse a given List

Question

35.1.2. Overview of List methods

13:42

6. **count(element)**: It is used to count the occurrences of a specified element within a list.

```
x = ['a', 'b', 'a', 'c', 'd', 'e', 'a']
x.count('a')
3
```

7. **sort(key = None, reverse = False)**: It is used to sort the elements of a list in ascending order. It modifies the original list in-place and does not return a new list. If the parameter reverse = True, then the list is sorted in descending order.

```
x = ['z', 'f', 'e', 'a','b', 'g', 't']
x.sort()
print(x)
['a', 'b', 'e', 'f', 'g', 't', 'z']
x.sort(key = None, reverse = True)
print(x)
['z', 't', 'g', 'f', 'e', 'b', 'a']
```

8. **reverse()**: It is used to reverse the order of elements of a list in place.

```
x = ['z', 'f', 'e', 'a','b', 'g', 't']
x.reverse()
print(x)
['t', 'g', 'b', 'a', 'e', 'f', 'z']
```

9. **copy()**: It is used to create a shallow copy of a list.

Sample Test Cases +

Explorer

Listmeth...

```
1  #write your code here
2  list1 = input("data1: ")
3  list1 = list1.split(",")
4  element = input("element: ")
5  list1.append(element)
6  print("after append:",list1)
7  list2 = input("data2: ")
8  list2= list2.split(",")
9  list1.append(list2)
10 print("after append:",list1)
11 list1.extend(list2)
12 print("after extending:",list1)
13
```

Average time: 0.014 s (14.00 ms) | Maximum time: 0.015 s (15.00 ms)

2 out of 2 shown test case

2 out of 2 hidden test case

Test case 1 15 ms

Expected output	Actual output
data1: Python,Java	data1: Python,Jav
element: Perl	element: Perl
after append: ['Python', 'Java', 'Perl']	after append: ['Pyt
data2: Swift,Django,R programming	data2: Swift,Djang
after append: ['Python', 'Java', 'Perl', ['Swift', 'Django', 'R programming']]	after append: ['Pyt t', 'Django', 'R pr

Terminal | Test cases | Submit

35.1.3. Write a program to reverse a given List

20:04

Create a list with the user-given elements. Write a program to reverse the given list, and print the result to the console as shown in the example.

```
Sample Input and Output:data: Python,Java,Perl,Swift,R
reverse: ['R', 'Swift', 'Perl', 'Java', 'Python']
```

Sample Test Cases

+

Explorer

List12.py

```
1  # write your code here
2  data = input("data: ").split(",")
3  print("reverse:",data[::-1])
```

Average time
0.006 s
6.50 ms

Maximum time
0.009 s
9.00 ms

2 out of 2 shown test case(s) p

2 out of 2 hidden test case(s) p

Test case 1 9 ms

Expected output

```
data: Python,Java,Perl,Swift,R
reverse: ['R', 'Swift', 'Perl', 'Java', 'Pytho
n']
```

Actual output

```
data: Python,Java,Pe
reverse: ['R', 'Swift
n']
```

Test case 2 5 ms

Terminal | Test cases

Next >

Un-common Elements in Second List

Your task is to:

- Take two lists of integers from the user in which the elements are separated by a comma (,).
- Return the elements of list 2 excluding the common elements in both lists.

Note:

- Refer to the Displayed test cases for a better understanding.

Constraints:

1 <= number of list elements <= 100

Sample Test Case:

1,2,3,4,5 ----> Input the elements of the list 1 separated by a comma.
4,5,6 ----> Input the elements of list 2 separated by a comma.
[6] ----> Print the elements of list 2 excluding the common elements in both lists.

Sample Test Cases

Test Case 1:

Expected Output:

```
1,2,3,4,5
4,5,6
[6]
```

Test Case 2:

Expected Output:

```
33,44,55
66,77,88
[66, 77, 88]
```

commonele.py

```
1 # write your code here.
2
```

Finish Clear Submit Prev Next

Write the code

You are given a list of the scores of the students who have participated in the running - race. Your task is to :

- Store the given scores in a space-separated list.
- Find and Print the second least score.

Note:

- **Refer to the Displayed test cases for a better understanding.**
- **There must be at least two distinct integers to be taken in the list.**

Constraints:

2 <= length of the list <= 10

Sample Test case:

2 3 6 6 5
3

Explanation:

In the given test case, The input line contains the scores separated by space.
here the least score is 2.
Therefore the second least score is 3.

Instructions:

- Your input and output must follow the input and output layout mentioned in the visible sample test case.
- Hidden test cases will only pass when the user's input and output match the expected input and output.

Sample Test Cases

Test Case 1:

Expected Output:

runnerup.py

```
1  #write your code here
```

Execution Results

0 out of 3 shown cases passed

0 out of 3 hidden cases passed

✖ Test Case - 1 (Execution Time: 3 ms)

Expected Output	User Output
2 3 6 6 5	2 3 6 6 5
3	Empty

⚠ indicates the mismatch in the expected output

✖ Test Case - 2 (Execution Time: 3 ms)

Expected Output	User Output
123 23 1 23 2 223 12	123 23 1 23 2 223 12
2	Empty

⚠ indicates the mismatch in the expected output

Finish Close Submit Prev Next

Write the code

Your task is to:

- Take comma (',') separated list of elements and as well as the two positions as input from the user.
- Write a python program to swap the two elements in the list with respect to the provided positions.
- If any of the given positions are greater than the higher index of the list then it should print **Index out of range**.

Note:

- **Refer to the Displayed test cases for a better understanding.**

Constraints:

- 1 <= number of elements <= 100
- **Make use of built-in functions on lists to make your solution efficient.**

Sample Test case 1:

1,2,3,4,5 -----> Input elements of the list separated by comma(,).
1 -----> Enter the position 1
3 -----> Enter the position 2
[1,4,3,2,5] ---> Print the list after swapping the elements in the given positions

Instructions:

- Your input and output must follow the input and output layout mentioned in the visible sample test case.
- Hidden test cases will only pass when the user's input and output match the expected input and output.

Sample Test Cases

swappos.py

```
1  #write your code here
```

Execution Results

0 out of 3 shown cases successful

0 out of 3 hidden cases successful

✖ Test Case - 1 (Execution Time: 2 ms)

Expected Output	User Output
1,2,3,4,5	1,2,3,4,5
1	1
3	3
['1', '4', '3', '2', '5']	Empty

⚠ □ : indicates the mismatch in the expected output.

✖ Test Case - 2 (Execution Time: 2 ms)

Expected Output	Use
a,b,c,d,e,f,g,h	a,b,c

Finish Clear Submit Prev Next

Highest and Smallest Scores

You are given a list of the scores of the students who have participated in the running - race. Your task is to :

- Store the given scores in a space-separated list.
- Find and print the lowest and the highest scores.

Note:

- Refer to the Displayed test cases for a better understanding.
- There must be at least two distinct integers to be taken in the list.

Constraints:

2 <= length of the list <= 1000

Sample Test Case:

2 3 6 6 6 5
2 6

Explanation:

In the given test case, the input line contains the scores separated by space.
least score = 2
Highest score = 6

Sample Test Cases

Test Case 1:

Expected Output:

11 11 11 22 11 22 11 22 11

Test Case 2:

runnerup.py

```
1 # write your code here
2
```

Execution Results

0 out of 3 shown cases successful

0 out of 3 hidden cases successful

Test Case - 1 (Execution Time: 5 ms)

Expected Output	User Output
11 11 11 22 11 22 11 22 11	11 11 11 22 11 22 11 22
11 ·22	Empty

⚠ : indicates the mismatch in the expected output

Test Case - 2 (Execution Time: 3 ms)

Expected Output	User Output
100 200 20 10 300 30 400	100 200 20 10 300 30 4
10 ·400	Empty

⚠ : indicates the mismatch in the expected output

Finish Clear Submit Prev Next