

Solve Using if and for loop and data types methods ;

1) A Python code to swap first and last element of the list.

```
In [4]: my_list = [10,20,30,40,50]

# Check if the list has more than one element
if len(my_list) > 1:
    # Use a for loop to swap the first and last elements
    for i in range(len(my_list)):
        if i == 0: # Swap the first element
            temp = my_list[i]
            my_list[i] = my_list[-1]
        elif i == len(my_list) - 1: # Swap the last element
            my_list[i] = temp

print("List after swapping:", my_list)
```

List after swapping: [50, 20, 30, 40, 10]

2) count length of string

```
In [2]: my_string = "Hello, World!"
length = 0
for char in my_string:
    if char.isalpha(): # Check if the character is a letter
        length += 1

print(f"The number of alphabetic characters is: {length}")
```

The number of alphabetic characters is: 10

4) the sum of a only non-negative integer. ex, [1,4,-5,-20,10]

```
In [6]: numbers = [1, 4, -5, -20, 10]

# Initialize the sum
sum_of_non_negative = 0

for num in numbers:
    if num >= 0: # Check if the number is non-negative
        sum_of_non_negative += num

print(f"The sum of non-negative integers is: {sum_of_non_negative}")
```

The sum of non-negative integers is: 15

In []: