QUIZ 2

COMP9021 PRINCIPLES OF PROGRAMMING

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$ python3 quiz_2.py
Enter four positive integers: 0 10 20 5
Here is the list of generated values:
   [6, 6, 0, 4, 8, 7, 6, 4, 7, 5]
Here is a reversed copy of the list (why not?):
   [5, 7, 4, 6, 7, 8, 4, 0, 6, 6]
The minimal and maximal values are, respectively, 0 and 8.
The sum of all values is: 53
Starting from the middle of the list and wrapping around,
the indexes are:
   5, 6, 7, 8, 9, 0, 1, 2, 3, 4
In a copy of the list,
removing again and again the leftmost value
not strictly greater than its latest location (index):
   [6, 6, 4, 8, 7, 6, 7]
In a copy of the list,
removing again and again the rightmost largest value
so the resulting list of values has a sum no greater than 20:
   [6, 0, 4, 4, 5]
In a copy of the list,
starting from the leftmost occurrence of 5 and wrapping around,
collecting again and again the next larger value:
   [5, 6, 8]
The original list has not been modified indeed:
   [6, 6, 0, 4, 8, 7, 6, 4, 7, 5]
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Date: Trimester 1, 2023.

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$ python3 quiz_2.py
Enter four positive integers: 20 12 17 1
Here is the list of generated values:
    [11, 10, 2, 4, 10, 10, 1, 5, 9, 2, 0, 6]
Here is a reversed copy of the list (why not?):
    [6, 0, 2, 9, 5, 1, 10, 10, 4, 2, 10, 11]
The minimal and maximal values are, respectively, 0 and 11.
The sum of all values is: 70
Starting from the middle of the list and wrapping around, the indexes are:
    6, 7, 8, 9, 10, 11, 0, 1, 2, 3, 4, 5

In a copy of the list,
removing again and again the leftmost value
not strictly greater than its latest location (index):
    [11, 10, 4, 10, 10, 9]
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In a copy of the list, removing again and again the rightmost largest value so the resulting list of values has a sum no greater than 17: [2, 4, 1, 5, 2, 0]

In a copy of the list, starting from the leftmost occurrence of 1 and wrapping around, collecting again and again the next larger value:
[1, 5, 9, 11]
The original list has not been modified indeed:

[11, 10, 2, 4, 10, 10, 1, 5, 9, 2, 0, 6]

QUIZ 2

3

\$ python3 quiz_2.py

Enter four positive integers: 50 15 34 8 Here is the list of generated values:

[7, 13, 4, 5, 10, 14, 3, 11, 7, 12, 5, 1, 8, 5, 3]

Here is a reversed copy of the list (why not?):

[3, 5, 8, 1, 5, 12, 7, 11, 3, 14, 10, 5, 4, 13, 7]

The minimal and maximal values are, respectively, 1 and 14.

The sum of all values is: 108

Starting from the middle of the list and wrapping around, the indexes are:

7, 8, 9, 10, 11, 12, 13, 14, 0, 1, 2, 3, 4, 5, 6

In a copy of the list,

 ${\tt removing}$ again and again the leftmost value

not strictly greater than its latest location (index):

[7, 13, 4, 5, 10, 14, 11, 12]

In a copy of the list,

removing again and again the rightmost largest value

so the resulting list of values has a sum no greater than 34:

[7, 4, 5, 3, 5, 1, 5, 3]

In a copy of the list,

starting from the leftmost occurrence of 8 and wrapping around,

collecting again and again the next larger value:

[8, 13, 14]

The original list has not been modified indeed:

[7, 13, 4, 5, 10, 14, 3, 11, 7, 12, 5, 1, 8, 5, 3]

\$ python3 quiz_2.py

Enter four positive integers: 100 18 110 3

Here is the list of generated values:

[4, 14, 14, 5, 12, 11, 13, 16, 3, 17, 3, 2, 14, 8, 1, 6, 10, 7] Here is a reversed copy of the list (why not?):

[7, 10, 6, 1, 8, 14, 2, 3, 17, 3, 16, 13, 11, 12, 5, 14, 14, 4] The minimal and maximal values are, respectively, 1 and 17.

The sum of all values is: 160

Starting from the middle of the list and wrapping around, the indexes are:

9, 10, 11, 12, 13, 14, 15, 16, 17, 0, 1, 2, 3, 4, 5, 6, 7, 8

In a copy of the list,

removing again and again the leftmost value

not strictly greater than its latest location (index):

[4, 14, 14, 5, 12, 11, 13, 16, 17, 14]

In a copy of the list,

removing again and again the rightmost largest value

so the resulting list of values has a sum no greater than 110:

[4, 14, 5, 12, 11, 13, 3, 3, 2, 8, 1, 6, 10, 7]

In a copy of the list,

starting from the leftmost occurrence of 3 and wrapping around,

collecting again and again the next larger value: [3, 17]

The original list has not been modified indeed:

[4, 14, 14, 5, 12, 11, 13, 16, 3, 17, 3, 2, 14, 8, 1, 6, 10, 7]