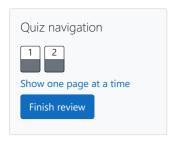
GE23131-Programming Using C-2024



Status Finished
Started Monday, 13 January 2025, 1:16 AM
Completed Monday, 13 January 2025, 1:25 AM
Duration 8 mins 46 secs

Question **1**Correct
Marked out of

Given an array of integers, reverse the given array in place using an index and loop rather tha

Example

arr = [1, 3, 2, 4, 5]

Return the array [5, 4, 2, 3, 1] which is the reverse of the input array.

Function Description

Complete the function reverseArray in the editor below.

reverseArray has the following parameter(s):

int arr[n]: an array of integers

Return

int[n]: the array in reverse order

Constraint

 $1 \le n \le 100$

 $0 < arr[i] \le 100$

Input Format For Custom Testing

The first line contains an integer, *n*, the number of elements in *arr*.

Each line i of the n subsequent lines (where $0 \le i < n$) contains an integer, arr[i].

Sample Case 0

Sample Input For Custom Testing

5

1

3

4

5

Sample Output

5

4

2

3

1

Explanation

The input array is [1, 3, 2, 4, 5], so the reverse of the input array is [5, 4, 2, 3, 1].

Sample Case 1

Sample Input For Custom Testing

4

17

10

21

45

Sample Output

45

21

10

17

Explanation

The input array is [17, 10, 21, 45], so the reverse of the input array is [45, 21, 10, 17].

Test	Expected	Got	
<pre>int arr[] = {1, 3, 2, 4, 5}; int result count;</pre>	5	5	
<pre>int* result = reverseArray(5, arr, &result_count);</pre>		2	
for (int i = 0; i < result_count; i++)	3	3	
<pre>printf("%d\n", *(result + i));</pre>	1	1	

Passed all tests!

Question **2**Correct
Marked out of 1.00

Flag

question

An automated cutting machine is used to cut rods into segments. The cutting machine can o of *minLength* or more, and it can only make one cut at a time. Given the array *lengths[]* repre of each segment, determine if it is possible to make the necessary cuts using this machine. The already, in the order given.

Example

n = 3 lengths = [4, 3, 2] minLength = 7

The rod is initially sum(lengths) = 4 + 3 + 2 = 9 units long. First cut off the segment of length = 2. Then check that the length 7 rod can be cut into segments of lengths 4 and 3. Since 7 is to minLength = 7, the final cut can be made. Return "Possible".

Example

n = 3 lengths = [4, 2, 3]minLength = 7

The rod is initially sum(lengths) = 4 + 2 + 3 = 9 units long. In this case, the initial cut can be c Regardless of the length of the first cut, the remaining piece will be shorter than minLength. I be made, the answer is "Impossible".

Function Description

Complete the function *cutThemAll* in the editor below.

cutThemAll has the following parameter(s):
int lengths[n]: the lengths of the segments, in order
int minLength: the minimum length the machine can accept

Returns

Constraints

- $\cdot \qquad 2 \le n \le 10^5$
- $\cdot \qquad 1 \le t \le 10^9$
- $1 \le lengths[i] \le 10^9$
- · The sum of the elements of lengths equals the uncut rod length.

Input Format For Custom Testing

The first line contains an integer, *n*, the number of elements in *lengths*.

Each line i of the n subsequent lines (where $0 \le i < n$) contains an integer, lengths[i].

The next line contains an integer, minLength, the minimum length accepted by the machine.

Sample Case 0

Sample Input For Custom Testing

```
STDIN Function
-----

4 → lengths[] size n = 4

3 → lengths[] = [3, 5, 4, 3]

5

4

3

9 → minLength = 9
```

Sample Output

Possible

Explanation

The uncut rod is 3 + 5 + 4 + 3 = 15 units long. Cut the rod into lengths of 3 + 5 + 4 = 12 and piece into lengths 3 and 5 + 4 = 9. The remaining segment is 5 + 4 = 9 units and that is long cut.

Sample Case 1

Sample Input For Custom Testing

```
STDIN Function
-----
3 → lengths[] size n = 3
5 → lengths[] = [5, 6, 2]
6
2
12 → minLength= 12
```

Sample Output

Impossible

Explanation

Answer: (penalty regime: 0 %)

Reset answer

Test	Expected	Got
long lengths[] = {3, 5, 4, 3}; printf("%s", cutThemAll(4, leng	Possible possible	Possible
<pre>long lengths[] = {5, 6, 2}; printf("%s", cutThemAll(3, length)</pre>		Impossible

Passed all tests!

Save the state of the flags