

[All Domains](#) > [Algorithms](#) > [Sorting](#) > Almost SortedBadge Progress [\(Details\)](#)

Points: 1440.13 Rank: 4843

Almost Sorted

by [PRASHANTB1984](#)

Problem

Submissions

Leaderboard

Discussions

Editorial

Given an array with n elements, can you sort this array in *ascending order* using only one of the following operations?

1. Swap two elements.
2. Reverse one sub-segment.

Input Format

The first line contains a single integer, n , which indicates the size of the array.

The next line contains n integers separated by spaces.

```
n
d1 d2 ... dn
```

Constraints

$$2 \leq n \leq 100000$$

$$0 \leq d_i \leq 1000000$$

All d_i are distinct.

Output Format

1. If the array is already sorted, output **yes** on the first line. You do not need to output anything else.

1. If you can sort this array using one single operation (from the two permitted operations) then output **yes** on the first line and then:

a. If you can sort the array by swapping d_l and d_r , output **swap l r** in the second line. l and r are the indices of the elements to be swapped, assuming that the array is indexed from 1 to n .

b. Else if it is possible to sort the array by reversing the segment $d[l \dots r]$, output **reverse l r** in the second line. l and r are the indices of the first and last elements of the subsequence to be reversed, assuming that the array is indexed from 1 to n .

$d[l \dots r]$ represents the sub-sequence of the array, beginning at index l and ending at index r , both inclusive.

If an array can be sorted by either swapping or reversing, stick to the swap-based method.

2. If you cannot sort the array in either of the above ways, output **no** in the first line.

Sample Input #1

```
2
4 2
```

Sample Output #1

```
yes
swap 1 2
```

Sample Input #2

```
3
3 1 2
```

Sample Output #2

```
no
```

Sample Input #3

```
6
1 5 4 3 2 6
```

Sample Output #3

```
yes
reverse 2 5
```

Explanation

For #1, you can both *swap*(1, 2) and *reverse*(1, 2), but if you can sort the array using swap, output swap only.

For #2, it is impossible to sort by one single operation (among those permitted).

For #3, you can reverse the sub-array $d[2...5] = "5\ 4\ 3\ 2"$, then the array becomes sorted.

Copyright © 2016 HackerRank.
All Rights Reserved

Submissions: 3472

Max Score: 50

Difficulty: Moderate

[More](#)

Current Buffer (saved locally, editable)  

Java 8



```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named
8         Solution. */
9     }
10 }
```

Line: 1 Col: 1

 Upload Code as File

☐ Test against custom input

Run Code

Submit Code

Join us on IRC at [#hackerrank](#) on freenode for hugs or bugs.

[Contest Calendar](#) | [Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Privacy Policy](#) | [Request a Feature](#)