Almost Sorted

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 \le n \le 100000\$
\$0 \le d\$_{\$i\$} \$\le 1000000\$
All \$d\$_{si\$} 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^{*}_{1} and d^{*}_{1} , output swap / r in the second line. \$1\$ 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[1...r]\$, output *reverse | r* in the second line. \$1\$ 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...r]\$ represents the sub-sequence of the array, beginning at index \$I\$ 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.

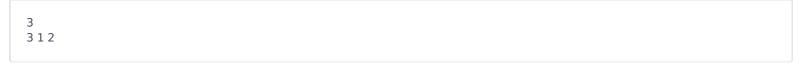
Sample Input #1

```
2
4 2
```

Sample Output #1

```
yes
swap 1 2
```

Sample Input #2



Sample Output #2

no

Sample Input #3

6 154326

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.