BETA Can't read the text? Switch theme

22. Question 22

A shopkeeper in *HackLand* assigns each item in a shop a unique *popularity* rating. To order the items in decreasing popularity from left to right, the shopkeeper can swap any 2 items in one operation. Determine the minimum number of operations needed to reorder the items correctly.

Example

n = 4
popularity = [3, 4, 1, 2]

First switch *3* and *4* to get *popularity' = [4, 3, 1, 2]*.
Then switch *1* and *2* to get *[4, 3, 2, 1]*.
The array is reordered in *2* operations.

Function Description

Complete the function *minimumSwaps* in the editor below.

minimumSwaps has the following parameter(s):
int popularity[n]: an array of integers that represents the popularity of each item

Returns:
int : the minimum number of swaps to order the items properly

Constraints

- $1 \leq n \leq 2 \times 10^5$