

Assignment 6 - Rearranging cars

There is a parking lot with N spaces and $N-1$ cars in it. Your task is to write an algorithm to rearrange the cars in a given way. Only one car can be moved at a time to the empty slot.

The parking lot is described by an array of numbers. Let's identify cars with numbers from 1 to $N-1$, and the number 0 means an empty parking space.

The input to your function is two arrays, each with a permutation of the numbers 0 to N (you don't have to validate it). Your function must generate a series of moves and print them.

For example, with $N=4$ and the inputs $[1, 2, 0, 3]$ and $[3, 1, 2, 0]$, the following output could be generated:

- move from 0 to 2
- move from 3 to 0
- move from 1 to 3
- move from 2 to 1
- move from 3 to 2

Same example visually:

