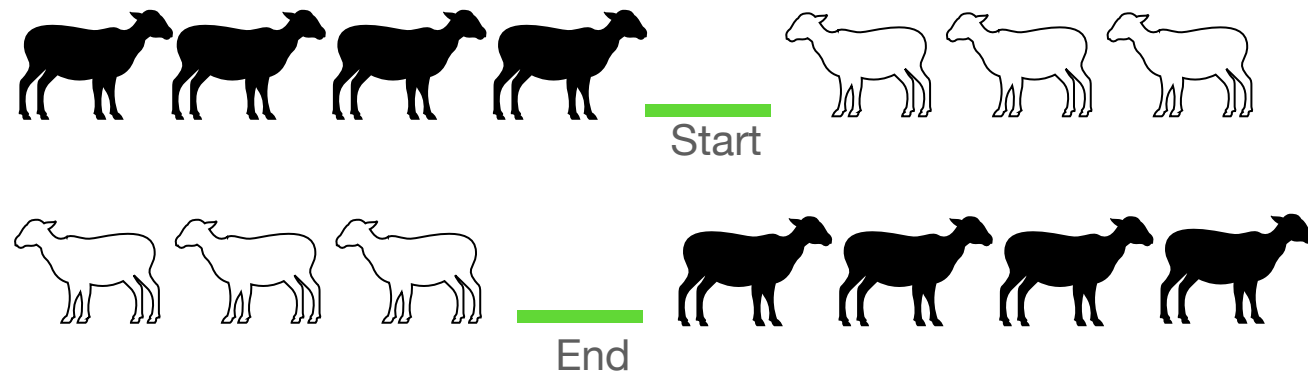



Write a Python program to solve the following problem:

A shepherd must move all the black sheep from left to right, and all the white sheep from right to left:



Rules:

- There is only one empty space ()
- A sheep must move to an empty space, or jump over another sheep and land on an empty space
- A sheep can't jump over more than one sheep
- A sheep always faces the same direction and can't move backward or jump backward

Your program must solve for any number of black sheep and white sheep. You don't have to find all the solutions, or the best solution. Finding one solution is enough.

Print all the steps to reach the solution.

Symbolic representation of the solution is fine. No image or animation needed.