Ex.

[0 0 0 1 9]

[0*, 0, 0, 1, 9] [1*, 0, 0, 0, 9] [9*, 0, 0, 0, 1]

Q: Why don't we need to swap back after each iteration?

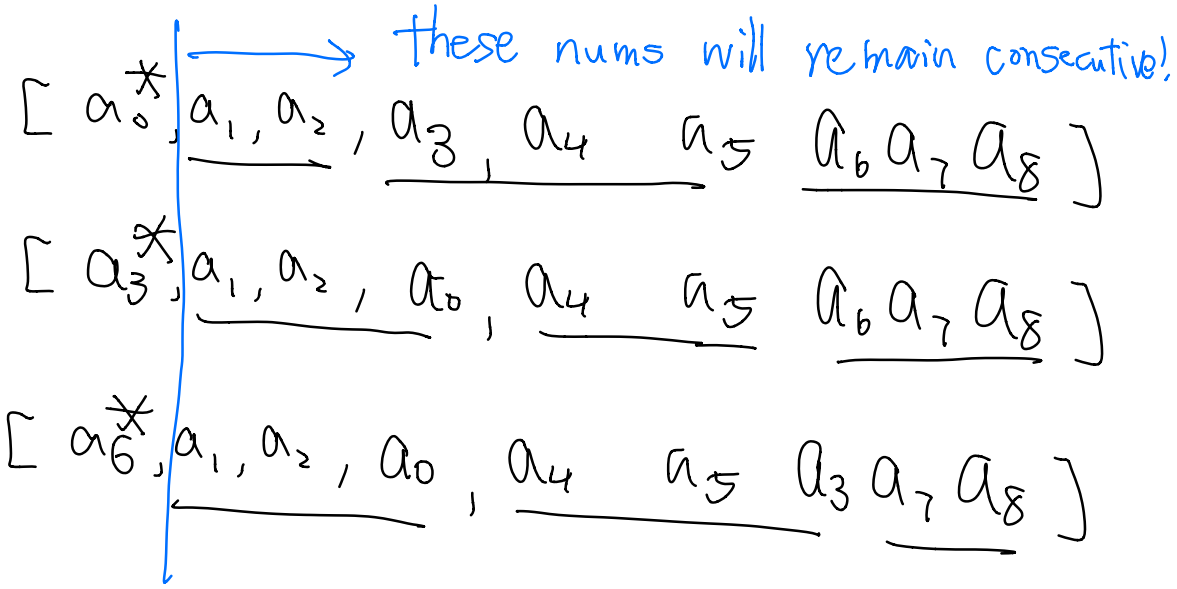
A: So that duplicate numbers after * will consecutive

[a_0, a_1, a_2 , a_3, a_4 a_5 $a_6 a_7 a_8$]

($a_0 = a_1 = a_2$) ($a_3 = a_4 = a_5$) ($a_6 = a_7 = a_8$)

Let's say we have several consecutive sections.

The swapping will like this



Q: Why does this behavior happens?

A: Because each time we swap two numbers like swap(src, dst) src, dst will at the beginning or the end of a consecutive section!