**Problem**

A and B  are playing a game. In this game, both of them are initially provided with a **list of**n**numbers**. (Both have the same list but their own copy).

Now, they both have a different strategy to play the game. A picks the element from **start of his list**.B picks from the **end of his list**.

You need to generate the result in form of an output list.

Method to be followed at each step to build the output list is:

1. If the number picked by A**is bigger than**Bthen this step's **output is**1. B **removes** the number that was picked from their list.
2. If the number picked by A**is smaller than**Bthen this step's **output is**2. A**removes** the number that was picked from their list.
3. If both have the **same number** then this step's**output is**0. **Both**A**and**B**remove** the number that was picked from their list.

This game **ends** when at least one of them has no more elements to be picked i.e. when the**list gets empty**.

Show the built output.