Inserting Elements

Instead of adding items to the end of the "unoccupied" section of numbers in an array, suppose you placed each number **into its correct (ordered) position** instead, like this:

The array shown here is partially filled, and the next number, `3.25`, has been input by the user. To put the number in its correct location you need to:

1. Locate the **first number** that is **larger** than the number you're going to insert into the array. Here, that's the number `7.1`.
2. Before you can store `3.25`, the `7.1` needs to be moved to the right. But first, the number occupying that spot must be moved, and so on.
3. After all of the existing numbers have been moved to the right, come back and **store the new number** in the spot that's been opened up.

This only makes sense **when used with partially filled arrays**; if you try to insert an element into a completely filled array, then the last element in the array will be lost when the previous items are moved to make room for the inserted item.