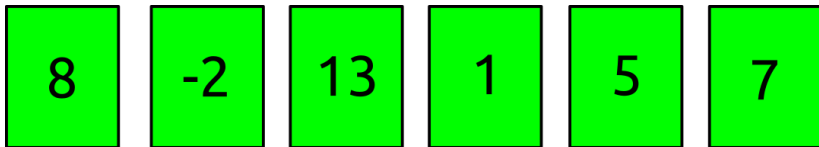# Recursion activity

Let's have a list of length *n*:

Your task is to **sort the list using recursion**. Each of you is limited to the following actions:

1. if anyone *asks me for the help*:
   - if the list has only one element
     $\rightarrow$ return it to the caller with words: "Here you are"
   - else
     $\rightarrow$ take the sticky note with *greatest element* from the list and keep it
     $\rightarrow$ ask your neighbour to the help you sort the rest of the list with words: "Please, sort this list for me"
2. if anyone returns you a list:
   - place your sticky note at the end of the list
   - return your list to the caller with words: "Here you are"