STL list

Implement different operation on **List A** i.e. adding an element in front and end, removing an element from the front and end, sorting elements, reversing the list and printing the list.

Input:
The first line of input contains an integer **T** denoting the no of test cases.For each test case, the first line of input contains an integer **Q** denoting the no of queries. Then in the next line are **Q** space separated queries.
A query can be of eight types
1 x (Adds an element x to the list A at the end and print list A)
2 (Sorts the list A in ascending order and print list A)
3 (Reverses the list A and print list A)
4 (Prints the size of the list A)
5 (Prints space-separated values of the list)
6 (Remove an element from the back of the list and print list A)
7(Remove an element from the front of the list and print list A)
8 x (Adds element x in front of the list and print list A)

Output:
The output for each test case will be according to the query that is performed and if the list is empty output is **-1**.

Constraints:
1<=T<=100
1<=Q<=100

Example:
Input:
1
8
1 5
8 1
3
4
5
6
1 6
7
Output:
5
1 5
5 1
2
5 1
5
5 6
6