

Sort a stack Using Recursion

Given a stack, the task is to sort it such that the top of the stack has the greatest element.

Example 1:

Input:

Stack: 3 2 1

Output: 3 2 1

Example 2:

Input:

Stack: 11 2 32 3 41

Output: 41 32 11 3 2

Your Task:

You don't have to read input or print anything. Your task is to complete the function **sort()** which sorts the elements present in the given stack. (The sorted stack is printed by the driver's code by popping the elements of the stack.)

Expected Time Complexity: $O(N*N)$

Expected Auxilliary Space: $O(N)$ recursive.

Constraints:

$1 \leq N \leq 100$