

155 - Min Stack

Approach 1: 2 stacks, on one stack, we push all elements, on the other, we push only new minimums (or values equal to the current minimum). The min_stack will contain elements that were once the minimum and still remain in the stack (with most recent ^{→ i.e. current} minimum at the top). This enables us to find the new minimum if the old one gets popped off the stack (it is the element now at the top of min_stack). ✓

This is also why values equal to the current minimum must be pushed onto min_stack, because otherwise, in case it gets popped, we would wrongly pop an older entry of the same value (which is still in the stack) off min_stack and lose the current minimum