The diagram shows a linked list starting with a `head` node, followed by a sequence of nodes labeled with values 1, 3, 7, 10, 3, and 6, and ending with a `tail` node. The list has a cycle with a pointer `p` starting from node 5 and pointing to node 7, then to node 10, to node 3, and then back to node 6. The problem is to detect a cycle in the list. If `p1` is equal to `p2` (where `p2` is `p1.next.next`), then there is a cycle. Additionally, `p1 < p1.next` and `p2 < p2.next.next`.
array implementation
of stack

amortized