

Question #1:

The MinStack class is meant to be a stack that supports the following operations:

- `push(int val)`: Pushes a value onto the stack.
- `pop()`: Removes the top value from the stack.
- `getMin()`: Retrieves the minimum value in the stack.
- `getLast()`: Retrieves the last (most recent) value pushed onto the stack.

To efficiently support the `getMin` operation, you can use an auxiliary stack (`minStack`) to keep track of the minimum value:

1. **Main Stack (`myStack`)**: Holds all the values.
2. **Auxiliary Stack (`minStack`)**: Keeps track of the current minimum value.

Implementation Details

1. **Push Operation:**
 - Push the value onto the main stack.
 - Update the minimum stack: If `minStack` is empty or the new value is smaller than the current minimum, push the new minimum onto `minStack`.
2. **Pop Operation:**
 - Pop the value from the main stack.
 - If the value matches the top of `minStack`, pop from `minStack` as well.
3. **Get Minimum:**
 - Return the top value of `minStack`, which is the current minimum.
4. **Get Last:**
 - Return the top value of the main stack.

Question # 2:

The StackCust class implements a basic stack with operations to push, pop, peek, and check if the stack is full or empty. Here's a quick overview and some improvements to ensure the class behaves correctly:

Key Points and Corrections

1. **Constructor:** Initializes the stack with a given size and sets the top index to -1.
2. **isEmpty():** Checks if the stack is empty.
3. **isFull():** Checks if the stack is full.
4. **push(int elem):** Adds an element to the stack if it's not full.
5. **peek():** Returns the top element of the stack without removing it.
6. **pop():** Removes and returns the top element of the stack.

Issues in the Current Implementation

- **pop() Method:** The pop() method should return the element that was removed. The current implementation returns arr[top] after decrementing top, which could be incorrect if the stack was empty.
- **peek() Method:** The peek() method correctly checks if the stack is empty before accessing arr[top].