To remove all elements from a stack recursively, you can utilize the following approach:

1. **Base Case**: If the stack is empty, return (no further action is needed).
2. **Recursive Case**: Pop the top element from the stack and recursively call the method to remove the rest of the elements.

Here is how you can implement the recursive method to remove all elements from a stack:

import java.util.Stack;

public class StackClear {

// Recursive method to remove all elements from the stack

public static void removeAllElements(Stack<Integer> stack) {

// Base case: if the stack is empty, return

if (stack.isEmpty()) {

return;

}

// Remove the top element

stack.pop();

// Recursively call the method to remove the next element

removeAllElements(stack);

}

public static void main(String[] args) {

// Test the removeAllElements method

Stack<Integer> stack = new Stack<>();

// Add elements to the stack

stack.push(1);

stack.push(2);

stack.push(3);

stack.push(4);

System.out.println("Stack before removal: " + stack);

// Remove all elements from the stack recursively

removeAllElements(stack);

System.out.println("Stack after removal: " + stack);

}

}