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Homework #4

1. B, F, G cannot occur.
2. B, C, D cannot occur.
3. Choose 1: Dominators in array of integers

Iterate through the array from right to left. Save the last element as the “max value” and save the index of the element in a new array of dominator indices. As you go from right to left, if the element is greater than the max value then save it as the new max and add its index to the array.

1. Choose 1: Balanced and nested parentheses

Iterate through the string from left to right. At each spot, if the character is an open parenthesis, add it to a stack. When you reach a closed parenthesis, remove from the stack. If there are no open parenthesis on the stack when you reach a closed parenthesis, then the string is not balanced. When you reach the end of the string, if there are any parenthesis on the stack, then the string is not balanced. If the stack is empty and the last element is a closed parenthesis, then the string is balanced.