

739. Daily Temperatures

Given a list of daily temperatures T , return a list such that, for each day in the input, tells you how many days you would have to wait until a warmer temperature. If there is no future day for which this is possible, put 0 instead.

For example, given the list of temperatures $T = [73, 74, 75, 71, 69, 72, 76, 73]$, your output should be $[1, 1, 4, 2, 1, 1, 0, 0]$.

```
class Solution {
    public int[] dailyTemperatures(int[] T) {
        if (T == null || T.length == 0)
            return new int[0];

        int[] ans = new int[T.length];
        Stack<Integer> stack = new Stack<>();

        // stack stores the index from back to front
        for (int i = T.length - 1; i >= 0; i--) {
            while (!stack.isEmpty() && T[i] >= T[stack.peek()])
                stack.pop();
            ans[i] = stack.isEmpty() ? 0 : stack.peek() - i;
            stack.push(i);
        }

        return ans;
    }
}
```