739. Daily Temperatures

🕐 Created	@October 14, 2022 2:56 PM
⊙ Difficulty	Medium
☰ LC Url	https://leetcode.com/problems/daily-temperatures/
⊙ Importance	
≔ Tag	NEET Stack
☰ Video	

Given an array of integers `temperatures` represents the daily temperatures, return *an array* `answer` *such that* `answer[i]` *is the number of days you have to wait after the* `i th` *day to get a warmer temperature*. If there is no future day for which this is possible, keep `answer[i] == 0` instead.

Example 1:

```
Input: temperatures = [73,74,75,71,69,72,76,73]
Output: [1,1,4,2,1,1,0,0]
```

Example 2:

```
Input: temperatures = [30,40,50,60]
Output: [1,1,1,0]
```

Example 3:

```
Input: temperatures = [30,60,90]
Output: [1,1,0]
```

Constraints:

- `1 <= temperatures.length <= 10 5`

- `30 <= temperatures[i] <= 100`

Solution

```python
class Solution:
    def dailyTemperatures(self, temperatures: List[int]) -> List[int]:
        res = [0] * len(temperatures)
        stack = []  # pair: [temp, index]

        for i, t in enumerate(temperatures):
            while stack and t > stack[-1][0]:
                stackT, stackInd = stack.pop()
                res[stackInd] = i - stackInd
            stack.append((t, i))
        return res
```