

Day 11:

1. Design a stack such that getMinium() should be  $O(1)$  time and  $O(1)$  space **[Medium]** **[Amazon, Bloomberg, Microsoft, Apple, VMware, Goldman Sachs]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/893/design-a-stack-such-that-getminium-should-be-o1-time-and-o1-space/18/module-5-problem-solving>

2. Print Next Greater Element **[Easy]** **[Amazon, Microsoft, Salesforce]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/404/print-next-greater-element/18/module-5-problem-solving>

3. Design and Implement Special Stack Data Structure. push(), pop(), getMinimum(), findMiddleElement(), deleteMiddleElement() **[Medium]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/407/design-and-implement-special-stack-data-structure-push-pop-getminimum-findmiddleelement-deletemiddleelement/18/module-5-problem-solving>

4. Check if parentheses are balanced or not **[Easy]** **[Amazon, Microsoft, LinkedIn, Apple, Facebook, Bloomberg, Google]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/894/check-if-parenthesis-are-balanced-or-not/18/module-5-problem-solving>

5. Stock Span Problem **[Medium]** **[Amazon, Bloomberg, Microsoft, Facebook, Google]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/406/stock-span-problem/18/module-5-problem-solving>

## Practice Questions:

6. Design a max stack data structure that supports the stack operations and supports finding the stack's maximum element. **[Medium]**  
**[LinkedIn, Microsoft, Amazon, Facebook]**

Practice link: <https://leetcode.com/problems/max-stack/>

7. Given a circular integer array nums (i.e., the next element of nums[nums.length - 1] is nums[0]), return the next greater number for every element in nums.

The next greater number of a number x is the first greater number to its traversing-order next in the array, which means you could search circularly to find its next greater number. If it doesn't exist, return -1 for this number. **[Medium]** **[Amazon, Facebook, Bloomberg, Adobe]**

Practice link: <https://leetcode.com/problems/next-greater-element-ii/>

8. 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 ith day to get a warmer temperature. If there is no future day for which this is possible, keep answer[i] == 0 instead. **[Medium]** **[Facebook, Amazon, Microsoft, Apple, Paypal, Adobe]**

Practice link: <https://leetcode.com/problems/daily-temperatures/>