

Solution 1

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class MinMaxStack:
4     def __init__(self):
5         self.minMaxStack = []
6         self.stack = []
7
8     # O(1) time | O(1) space
9     def peek(self):
10        return self.stack[len(self.stack) - 1]
11
12    # O(1) time | O(1) space
13    def pop(self):
14        self.minMaxStack.pop()
15        return self.stack.pop()
16
17    # O(1) time | O(1) space
18    def push(self, number):
19        newMinMax = {"min": number, "max": number}
20        if len(self.minMaxStack):
21            lastMinMax = self.minMaxStack[len(self.minMaxStack) - 1]
22            newMinMax["min"] = min(lastMinMax["min"], number)
23            newMinMax["max"] = max(lastMinMax["max"], number)
24        self.minMaxStack.append(newMinMax)
25        self.stack.append(number)
26
27    # O(1) time | O(1) space
28    def getMin(self):
29        return self.minMaxStack[len(self.minMaxStack) - 1]["min"]
30
31    # O(1) time | O(1) space
32    def getMax(self):
33        return self.minMaxStack[len(self.minMaxStack) - 1]["max"]
34
```

Solution 1 Solution 2 Solution 3

```
1 # Feel free to add new properties and methods to the class.
2 class MinMaxStack:
3     def peek(self):
4         # Write your code here.
5         pass
6
7     def pop(self):
8         # Write your code here.
9         pass
10
11    def push(self, number):
12        # Write your code here.
13        pass
14
15    def getMin(self):
16        # Write your code here.
17        pass
18
19    def getMax(self):
20        # Write your code here.
21        pass
22
```

Run or submit code when you're ready.