

Our Solution(s)Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 #include <vector>
4 #include <unordered_map>
5 using namespace std;
6
7 class MinMaxStack {
8 public:
9     vector<unordered_map<string, int>> minMaxStack = {};
10    vector<int> stack = {};
11
12    // O(1) time | O(1) space
13    int peek() { return stack[stack.size() - 1]; }
14
15    // O(1) time | O(1) space
16    int pop() {
17        minMaxStack.pop_back();
18        int result = stack[stack.size() - 1];
19        stack.pop_back();
20        return result;
21    }
22
23    // O(1) time | O(1) space
24    void push(int number) {
25        unordered_map<string, int> newMinMax = {"min", number}, {"m
26        if (minMaxStack.size()) {
27            unordered_map<string, int> lastMinMax =
28                minMaxStack[minMaxStack.size() - 1];
29            newMinMax["min"] = min(lastMinMax["min"], number);
30            newMinMax["max"] = max(lastMinMax["max"], number);
31        }
32        minMaxStack.push_back(newMinMax);
33        stack.push_back(number);
```

Your SolutionsRun Code

Solution 1Solution 2Solution 3

```
1 using namespace std;
2
3 // Feel free to add new properties and methods to the class.
4 class MinMaxStack {
5 public:
6     int peek() {
7         // Write your code here.
8         return -1;
9     }
10
11    int pop() {
12        // Write your code here.
13        return -1;
14    }
15
16    void push(int number) {
17        // Write your code here.
18    }
19
20    int getMin() {
21        // Write your code here.
22        return -1;
23    }
24
25    int getMax() {
26        // Write your code here.
27        return -1;
28    }
29 };
30
```

Custom OutputSubmit Code

```

1  }
2  secretHash.getHash() += secret;
3  secretHash.getHash() += secret;
4  secretHash.getHash() += secretHash;
5  }
6
7
8  class Program {
9  public:
10     static void Main() {
11
12         Console.WriteLine("Test Case 1", 1);
13         Console.WriteLine("Test Case 2", 2);
14         Console.WriteLine("Test Case 3", 3);
15         Console.WriteLine("Test Case 4", 4);
16         Console.WriteLine("Test Case 5", 5);
17         Console.WriteLine("Test Case 6", 6);
18         Console.WriteLine("Test Case 7", 7);
19         Console.WriteLine("Test Case 8", 8);
20         Console.WriteLine("Test Case 9", 9);
21         Console.WriteLine("Test Case 10", 10);
22         Console.WriteLine("Test Case 11", 11);
23         Console.WriteLine("Test Case 12", 12);
24         Console.WriteLine("Test Case 13", 13);
25         Console.WriteLine("Test Case 14", 14);
26         Console.WriteLine("Test Case 15", 15);
27         Console.WriteLine("Test Case 16", 16);
28         Console.WriteLine("Test Case 17", 17);
29         Console.WriteLine("Test Case 18", 18);
30         Console.WriteLine("Test Case 19", 19);
31         Console.WriteLine("Test Case 20", 20);
32         Console.WriteLine("Test Case 21", 21);
33         Console.WriteLine("Test Case 22", 22);
34         Console.WriteLine("Test Case 23", 23);
35         Console.WriteLine("Test Case 24", 24);
36         Console.WriteLine("Test Case 25", 25);
37         Console.WriteLine("Test Case 26", 26);
38         Console.WriteLine("Test Case 27", 27);
39         Console.WriteLine("Test Case 28", 28);
40         Console.WriteLine("Test Case 29", 29);
41         Console.WriteLine("Test Case 30", 30);
42         Console.WriteLine("Test Case 31", 31);
43         Console.WriteLine("Test Case 32", 32);
44         Console.WriteLine("Test Case 33", 33);
45         Console.WriteLine("Test Case 34", 34);
46         Console.WriteLine("Test Case 35", 35);
47         Console.WriteLine("Test Case 36", 36);
48         Console.WriteLine("Test Case 37", 37);
49         Console.WriteLine("Test Case 38", 38);
50         Console.WriteLine("Test Case 39", 39);
51         Console.WriteLine("Test Case 40", 40);
52         Console.WriteLine("Test Case 41", 41);
53         Console.WriteLine("Test Case 42", 42);
54         Console.WriteLine("Test Case 43", 43);
55         Console.WriteLine("Test Case 44", 44);
56         Console.WriteLine("Test Case 45", 45);
57         Console.WriteLine("Test Case 46", 46);
58         Console.WriteLine("Test Case 47", 47);
59         Console.WriteLine("Test Case 48", 48);
60         Console.WriteLine("Test Case 49", 49);
61         Console.WriteLine("Test Case 50", 50);
62         Console.WriteLine("Test Case 51", 51);
63         Console.WriteLine("Test Case 52", 52);
64         Console.WriteLine("Test Case 53", 53);
65         Console.WriteLine("Test Case 54", 54);
66         Console.WriteLine("Test Case 55", 55);
67         Console.WriteLine("Test Case 56", 56);
68         Console.WriteLine("Test Case 57", 57);
69         Console.WriteLine("Test Case 58", 58);
70         Console.WriteLine("Test Case 59", 59);
71         Console.WriteLine("Test Case 60", 60);
72         Console.WriteLine("Test Case 61", 61);
73         Console.WriteLine("Test Case 62", 62);
74         Console.WriteLine("Test Case 63", 63);
75         Console.WriteLine("Test Case 64", 64);
76         Console.WriteLine("Test Case 65", 65);
77         Console.WriteLine("Test Case 66", 66);
78         Console.WriteLine("Test Case 67", 67);
79         Console.WriteLine("Test Case 68", 68);
80         Console.WriteLine("Test Case 69", 69);
81         Console.WriteLine("Test Case 70", 70);
82         Console.WriteLine("Test Case 71", 71);
83         Console.WriteLine("Test Case 72", 72);
84         Console.WriteLine("Test Case 73", 73);
85         Console.WriteLine("Test Case 74", 74);
86         Console.WriteLine("Test Case 75", 75);
87         Console.WriteLine("Test Case 76", 76);
88         Console.WriteLine("Test Case 77", 77);
89         Console.WriteLine("Test Case 78", 78);
90         Console.WriteLine("Test Case 79", 79);
91         Console.WriteLine("Test Case 80", 80);
92         Console.WriteLine("Test Case 81", 81);
93         Console.WriteLine("Test Case 82", 82);
94         Console.WriteLine("Test Case 83", 83);
95         Console.WriteLine("Test Case 84", 84);
96         Console.WriteLine("Test Case 85", 85);
97         Console.WriteLine("Test Case 86", 86);
98         Console.WriteLine("Test Case 87", 87);
99         Console.WriteLine("Test Case 88", 88);
100        Console.WriteLine("Test Case 89", 89);
101        Console.WriteLine("Test Case 90", 90);
102        Console.WriteLine("Test Case 91", 91);
103        Console.WriteLine("Test Case 92", 92);
104        Console.WriteLine("Test Case 93", 93);
105        Console.WriteLine("Test Case 94", 94);
106        Console.WriteLine("Test Case 95", 95);
107        Console.WriteLine("Test Case 96", 96);
108        Console.WriteLine("Test Case 97", 97);
109        Console.WriteLine("Test Case 98", 98);
110        Console.WriteLine("Test Case 99", 99);
111        Console.WriteLine("Test Case 100", 100);
112    }
113 }

```

Run or submit code when you're ready.