

// Class for a special stack to get minimum element in O(1) Space and Time

```
class SpecialStack {  
    int minEle;  
    Stack<Integer> stack = new Stack<>();  
    int getMin() {  
        if (stack.size() == 0) {  
            return -1;  
        }  
        return minEle;  
    }  
    int pop() {  
        if (stack.size() == 0) {  
            return -1;  
        }  
        int y = stack.pop();  
        if (y >= minEle) {  
            return y;  
        } else {  
            int x = minEle;  
            int prevMinEle = (2 * x) - y;  
            minEle = prevMinEle;  
            return x;  
        }  
    }  
    void push(int x) {  
        if (stack.size() == 0) {  
            stack.push(x);  
            minEle = x;  
            return;  
        }  
        if (minEle < x) {  
            stack.push(x);  
        } else {  
            stack.push((2 * x) - minEle);  
            minEle = x;  
        }  
    }  
}
```