

## UID – 22BCS10645(AASHIMA NARULA)

### 3.Implement Min Stack using Two Stacks

```
class MinStack {  
    stack<int> s;  
    stack<int> minStack;  
  
public:  
    MinStack() {  
    }  
  
    void push(int val) {  
        s.push(val);  
        if (minStack.empty() || val <= minStack.top()) {  
            minStack.push(val);  
        }  
    }  
  
    void pop() {  
        if (s.top() == minStack.top()) {  
            minStack.pop();  
        }  
        s.pop();  
    }  
  
    int top() {  
        return s.top();  
    }  
}
```

```

int getMin() {
    return minStack.top();
}
};

```

The screenshot displays the LeetCode submission page for the 'Min Stack' problem. The top navigation bar includes 'Problem List', 'Run', 'Submit', and 'Premium'. The main content area is divided into several sections:

- Accepted:** 31 / 31 testcases passed. Submitted by Aashima Narula on Mar 19, 2025 23:28.
- Runtime Performance:** A bar chart showing runtime performance across different test cases. The chart indicates a runtime of 8 ms, which is 12.64% faster than the average. The memory usage is 23.46 MB, which is 40.89% better than the average.
- Code:** The C++ code is displayed in a dark-themed editor. It defines a 'MinStack' class with a 'stack' and a 'minStack' member, and implements 'push', 'pop', 'top', and 'getMin' methods.
- Testcase:** A table showing the test cases and their results. The first test case is highlighted, showing the sequence of operations: ["MinStack", "push", "push", "push", "getMin", "pop", "top", "getMin"] and the corresponding input: [1, [-2], [0], [-3], [], [], [], []].

