

# Chapter 2: C++ (Problem Sets)

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25 Jan 2025

## 1 Introduction

Please register an account on the following website to submit your solution:

- Codeforces
- AtCoder
- LeetCode

## 2 Sorting and Enumerating Vectors

Problems under this section are related to the usage of `std::vector`.

1. Codeforces 1325B
2. Codeforces 2010A
3. AtCoder ABC 387B

## 3 Enumerating Patterns in Strings

Problems under this section are related to the usage of `std::string`.

1. Codeforces 1324B
2. Codeforces 385B
3. Codeforces 550A

## 4 Stack

1. Maximum Nesting Depth of the parentheses
2. Valid Parentheses
3. Validate Stack Sequences

## 5 Set/Unordered set

1. Minimum Number of Operations to make elements in array distinct
2. Minimum Operations to make array values equal to k
3. Identify the largest outlier in an array

\*Please assume the range to be  $n \leq 1e5$  and  $nums_i \leq 1e9$

## 6 Map/Unordered map

1. Number of Winning Players
2. Top k frequent Elements
3. Reduce Array Size to the half

## 7 Priority Queue

1. Last Stone Weight
2. Car Pooling