

# Topic Title

Competitive Programming Notes

December 22, 2025

# Contents

# 1 Topic Overview

Introduction to the algorithm or data structure.

## 1.1 Key Concepts

### Constraint Analysis

**Constraints:**

- Time Limit: 1s
- Memory Limit: 256MB
- $N \leq 10^5$

## 2 Implementation Details

```
1 #include <bits/stdc++.h>
2 using namespace std;
3
4 void solve() {
5     // Your code here
6 }
7
8 int main() {
9     ios_base::sync_with_stdio(false);
10    cin.tie(NULL);
11    solve();
12    return 0;
13 }
```

Listing 1: Implementation Example

## 3 Tricks and Pitfalls

### Optimization

**Optimization Tip:** Description of how to optimize the standard approach.

### Common Pitfall

**Watch out for:** Common bugs or edge cases (e.g., integer overflow, off-by-one).

### Competitive Trick

**Useful Trick:** A specific technique or observation that simplifies the problem.