UQCS Competitive Programming Group

Getting started in competitive programming

UQ Computing Society

Anatomy Of A Problem

- Background Story/Description
  - The problem description might be deceptive sometimes – for example, easy questions might have extra information in description to make themselves look more difficult than they are.
- Input and Output Description
  - You will be given details on how input is formatted and how you should format your output. A good problem should also have clear input constraints.
- Sample Input and Sample Output
  - Usually only trivial testcases will be given to contestants.
  - Do not submit code if it doesn’t even pass the given sample input/output.
- Hints/Footnotes

Feedbacks

- There are typically 4 different feedback messages you can get after you submitted your code to submission portal:
  - **Accepted (AC)** – Congrats! You solve the problem.
  - **Wrong Answer (WA)** – There is at least one test case(s) you didn’t pass, could be either public or hidden.
  - **Runtime error (RTE)** – There is a runtime error when running testcases.
  - **Time Limit Exceeded (TLE)** – Your solution exceeds the time limit, and you might need to make a more efficient solution.

Scoring

- Different competitive programming contest can have different scoring systems.
- For SPAR and ICPC:
  - You are ranked by the number of questions solved
  - Tie is broken by the total time you spent on solving the questions.
  - You would receive a time penalty for every wrong submission (which is why you should test your solution locally before submitting)
- For our practice competition on HackerRank:
  - Each problem have a score assigned to them (could reflect difficulty)
  - No time penalty for wrong submissions

Practice Contest Time

- https://www.hackerrank.com/cpg-27082025

References

- Competitive Programming 3 - Felix Halim and Steven Halim