Shenendehowa Code Sprint

May 2015

Rules and Scoring

1. Each team can have up to three members and can only use one computer.

2. Use the internet for programming language reference only; do not try to search for solutions to the problems.

3. There are seven problems. Each problem comes in two versions: easy and hard. The hard version has larger and more complex test data. For each version of a problem, if your submission gets every test case correct for that version, your team gets one point. With **7 problems** and two versions of each, the max score is **14 points**.

4. Getting a test case correct means your program outputted the correct answer within the time and memory constraints. The default constraints are 1 second per test case and 512MB memory usage (generally, memory will not be a problem).

5. In the event of a tie, we look at time penalties. They are calculated as follows: every team starts with a penalty of zero. After a team gets a correct submission, the team's time penalty is incremented by the number of minutes since the competition began. For example, a team that solves 1-easy at 10 minutes and 1-hard a minute afterwards has a time penalty of 21 and a score of 2.

6. You can re-submit solutions to a problem as often as you want, but **an incorrect submission will increase your time penalty by 10**.

Notes

- Don't re-submit code to a version of a problem if you've already gotten it correct.

- For the hard versions of many problems, the test data is quite large and your code may exceed the time limit. It might be better for you to solve the easier versions of other problems before coming up with a more efficient approach to the current problem.

- If you want to test the performance of your program on large test data, consider creating another program to generate test data for you.

- The range of `int` is roughly from -2×10^9 to 2×10^9; beware of overflow.

- The problems should be ordered by how difficult their "hard" versions are. But estimating difficulty precisely is hard. **The scoreboard is the best indicator of what problems are easiest**. The more teams have solved something, the easier it is.