# **Programming Competition Rules**

## **Programming Problems**

Each programming problem is provided in printed and electronic form. From the competition website, you can download the problem PDFs along with the judging program, testing data files, test file generation program written by the judges and/or other resources. In general, as much is given to the teams as possible.

You may choose from many programming languages to solve these problems; currently, C, C++, Python 2, Python 3, Java, Scala, and Go are supported. Should you prefer another language, inform the judges as early as possible, and we will do our best to accommodate, if we can.

### **Submissions**

Each program you submit should expect test data to come from stdin (the console) and should print all results to stdout (the console). For debugging output, write to stderr. You may submit as many times as you wish for any problem in an attempt to improve your official score/ranking. To aid this, the problem downloads include,whenever possible, the exact judging programs and test data you could use to determine your score prior to submission. Your score for a problem will be calculated as the sum of the judged scores on each test data file for a problem. Dependent on the problem, low or high scores may be desirable.

#### Rank

To promote work on as many problems as possible, rank is first based on the number of problems for which a team solution has scored. This virtually guarantees teams will at least attempt and submit a solution to each problem. In the event of a tie, rank is determined by the sum of the team's rank for each problem scored; the lowest sum is the winner. Rank for a problem is determined first by best solution score, breaking ties by earliest submission time (NOT runtime) of the solutions. If there is a tie at the sum-of-ranks level, the winner is chosen by the head judge.

#### **Prizes**

Teams will be awarded prizes by choice, with the highest ranking teams selecting their prizes first.