

# General Rules

## Implementation Details

All input is from standard input and all output is to standard output. Submitted programs must not read or write to files.

Output must match the output format specified in the problem exactly. Prompts or additional output must not be produced.

Unless stated otherwise, programs will be evaluated with a 3 second time limit and a 512 MB memory limit.

## Submissions

We will accept up to 50 submissions per problem. Students may submit at most once per minute to any particular problem.

## Feedback

Feedback is always provided for the sample test cases. For each subtask of a problem, if all test cases are correct, this feedback is provided for each test case. Otherwise, feedback is provided for all test cases up to and including the first test case that is not correct. More specifically, when feedback is provided for a test case, one of the following results is reported.

- correct (e.g., your output matches the expected output exactly)
- compilation error (e.g., your program did not compile)
- time-limit exceeded (e.g., your program took too long to find an answer)
- run-time error (e.g., segmentation fault in your program)
- wrong answer (e.g., your program gave incorrect output)

## Contest Scoring

We will take the maximum score over all submissions for each problem as the student score for that problem.

We will take the maximum score between the Junior and Senior contest as the student's overall score.

Note that while it is possible for students to write both contests, the contest timer will begin when the student starts either the Junior or Senior contest: students will have a maximum of 3 hours in total to submit solutions to either contest.

## Use of the Internet, References and Other Tools

During the contest, students may use the internet for editing code, code compilation, contest submission, and consulting official programming language documentation.

Examples of allowed programming language documentation include:

<http://www.cplusplus.com/reference/>

<http://docs.oracle.com/javase/8/docs/api/>

<https://docs.python.org/2/reference/index.html>

<https://docs.python.org/3/reference/index.html>

<https://www.gnu.org/software/gnu-c-manual/gnu-c-manual.html>

<https://www.freepascal.org/docs-html/ref/ref.html>

All other Internet use is forbidden. This includes email, chat, web search, code forums, and generative AI such as CoPilot or ChatGPT.

Any editors or integrated development environments (IDEs) can be used to code solutions. This includes online editors and online compilation tools.

Access to other source or starter code is not allowed during the competition. This includes both electronic and printed source code, either created by the contestant or gathered elsewhere.

Most calculators are permitted. See <http://cemc.uwaterloo.ca/contests/calculators.html> for more information.

Students are allowed to use rough paper, graph paper, rulers and compasses.

Students may use paper dictionaries for translation between English and another language. Students may not use electronic translation devices.

Use of forbidden tools or sources, or collaboration with other students during the contest will result in severe penalties:

- the student will receive a score of 0 on the CCC;
- their school will be notified;
- the student will be banned from all future CCC contests.

Internet connections, server loads and other features of online systems are inherently unpredictable. Therefore, since we are only able to accept submissions successfully received through the CCC Grader within the 3-hour time limit, there is some risk when submissions are made near the end of the contest.