

## Notice

- Each task has a problem statement that you can download from the contest system.
- For each communication(interactive) task you have to submit one or two files that implement a function as described in the problem statement. Your submissions must not read from the standard input, write to the standard output, or interact with any other file. You can download an attachment package from the contest system that contains sample graders and sample implementations.
- For each batch task you have to submit exactly one file that must read from the standard input and print to the standard output.
- On the standard input, every two consecutive numbers in a single line are separated by a single space, unless another format is explicitly specified.
- In each batch task you may use the contest system to check your program with your own tests (without submitting), but the number of these tests is limited to 100 for all three tasks.
- You may make up to 100 submissions for each task.
- You must wait at least 30 seconds between two submits (including user tests).
- The name of each task is in the task statement header.
- Unless noted otherwise in the problem statement your final score for a task is the sum over each subtask of the best result for that subtask across all submissions.

## Limits

<b>Task</b>	<b>Time limit</b>	<b>Memory limit</b>
fountain	1.5 sec	512 MiB
triangulation	1.0 sec	512 MiB
exam	1.0 sec	512 MiB