

Notice

Each task has a statement that you can download from the CMS interface.

- Your solution must read the input data from standard input and print the results to standard output.
- You can submit solutions only once every 30 seconds per task, except in the last 15 minutes when there is no such restriction.
- You can submit a maximum of 100 solutions per task.
- Your solutions must not interact in any way with the file system or with any other system interfaces (besides the standard input and output). You can print anything to the error stream.
- If you are using streams for input/output (`cin` and `cout`), we recommend adding the following lines to the beginning of your `main` function:

```
ios_base::sync_with_stdio(false);  
cin.tie(NULL);
```

Limits

Task	Time limit	Memory limit
AB	2.0 seconds	256 MB
Maximum Prime Factor	1.0 second	64 MB
Roboclean	0.2 seconds	256 MB

Scoring

Task AB has subtasks. You get all the points for a subtask if and only if you correctly solve all the test cases that comprise that subtask. Your final score for the task will be the sum of the maximum scores you obtained for each subtask across all your submissions.

For tasks Maximum Prime Factor and Roboclean, each test case is scored separately. Your final score for the task will be the maximum score you received for a single submission.