International Olympiad in Informatics 2016
12-19th August 2016
Kazan, Russia
day1_notice

notice
Country: ISC
Revision:

Implementation Notice

- You have to submit exactly one file (file name given in the problem statement).
- This file implements the subprograms described in the task statement using signatures provided in the sample implementation.
- These subprograms must behave as described in the task statement.
- You are free to implement other subprograms (functions, procedures, methods).
- Your submissions must not interact in any way with standard input/output stream, nor with any other file. In particular, if your program outputs anything to standard output stream, its grading outcome on this test will be SV (Security Violation). You may output anything to standard error stream.

Conventions

The task statements use the word *array* and the Implementation details sections use the type `int[]`. Depending on the programming language, the graders use the following types in place of `int[]` (and for simplicity, we call all of them arrays):

- `std::vector<int>` in C++,
- `int*` in C,
- `array of longint` in Pascal,
- `int[]` in Java.

The Implementation details sections use the type `int64`. It corresponds to 64-bit signed integer type:

- `long long` in C++/C,
- `int64` in Pascal,
- `long` in Java.

Limits

Problem	Time Limit	Memory Limit
Detecting Molecules	1 second	2 GB
Roller Coaster Railroad	2 seconds	2 GB
Shortcut	2 seconds	2 GB