



Maratona de Programação da SBC 2023

Sub-Regional Brasil do ICPC
Gran Premio de México 2023
Gran Premio de Centroamérica 2023
The 2023 ICPC Bolivia Preliminary Contest
Torneo Chileno de Programación 2023

September 2nd 2023

Time Limits

The time limits are given in seconds:

Problem	C/C++	Java/Kotlin	Python
A	0.1	0.2	0.1
B	0.5	1.0	2.0
C	0.2	0.7	1.0
D	4.5	5.5	4.5
E	0.3	1.5	2.0
F	0.1	0.3	0.1
G	0.2	0.7	1.5
H	0.2	0.7	0.2
I	0.1	0.3	0.2
J	8.0	8.0	8.0
K	0.7	3.0	0.7
L	0.1	0.3	0.2
M	0.1	0.3	0.3

Memory limits

The memory limit for all problems and languages is 1GB. The stack size limit is 100MB.

Other limits

File size: 100KB

Building commands

C: `gcc -g -O2 -std=gnu11 -static -o {solution} {submission_filename} -lm`

C++20: `g++ -g -O2 -std=gnu++20 -static`

Java: `javac`

Kotlin: `kotlinc -J-Xms1024m -J-Xmx1024m -J-Xss100m -include-runtime`

C/C++

- Your program should return zero, executing, as last command `return 0` or `exit(0)`.
- It's been noticed that in some problems where the inputs are too big, the objects `cin` could be slow due to the buffer synchronization from the library `stdio`. If you still want to use `cin` and `cout`, a work around this problem is to use `ios_base::sync_with_stdio(0)`, and the beginning of your `main` function. Note that, in this case, using `scanf` and `printf` in the same program is not recommended, because having separate buffer could cause unexpected behaviors.

Java

- Do not declare 'package' in your Java program.
- Note that you should obey convention while naming the source file. This means that name of your public class should be a capital letter (A, B o C).
- The command to execute a Java solution is the following: `java -Xms1024m -Xmx1024m -Xss100m`

Kotlin

- Do not declare 'package' in your Kotlin program.
- Note that you should obey convention while naming the source file. This means that name of your public class should be a capital letter (A, B o C).
- The command to execute a Kotlin solution is the following: `: kotlinc -J-Xms1024m -J-Xmx1024m -J-Xss100m`
- Warning: it is not guaranteed that the solutions in Kotlin are going run to the established time limits.

Python

- Be careful while selecting the right version while submitting
- Warning: it is not guaranteed that the solutions in Python are going run to the established time limits.

Instructions to submit a solution in Boca

Submitting solutions

To submit a solution to a problem you should use Boca’s web portal:

- Open your browser
- Login with your team credentials (use the provided user and password).
- Go to the **Runs** tab. Select the target problem, the language used and the source file.

Verdicts

To see the verdict of the judge to your submission you should use Boca’s web portal:

- Open your browser
- Login with your team credentials (use the provided user and password).
- Go to the **Runs** tab.

The verdicts you can get from the judge to your submission are the following:

- 1 - YES
- 2 - NO - Compilation error
- 3 - NO - Runtime error
- 4 - NO - Time limit exceeded
- 5 - NO - Wrong answer
- 6 - NO - Contact staff
- 7 - NO - Class name mismatch
- 8 - NO - Wrong language
- 9 - NO - Problem mismatch

The meaning of 1, 2, 3 and 4 are self-explanatory

- Regarding 1 and 5:
 - if the output of the solution submitted by the team is exactly the same as the judge’s output , the verdict is “YES’
 - otherwise is “Wrong Answer’.
- Regarding 6: this verdict is used in unexpected circumstances. In this case, to get more information use the menu “Clarifications” and provide the “run” number.
- Regarding 7: can only be obtained from solutions written in Java or Kotlin. Occurs when a team submits a solution with a different main class name than specified, causing an error while executing the submission. This verdict is not used in submissions written in C/C++ or Python.
- Regarding 8: most of the times used for solutions written in Python3, however, it can be presented in other languages.
- Regarding 9: wrong problem selected when submitting the solution.

Notice that it is not always possible to distinguish between verdicts 3, 7 ,8 and 9. For example, when a team submits a solution to the problem B. java where the public class A is the main one for the problem textttA, the verdict could be “Class name mismatch” or “Problem mismatch”.

Clarifications

To request clarifications regarding a problem statement you should use Boca’s web portal:

- Open your browser
- Login with your team credentials (use the provided user and password).
- Pick the problem from where you want clarifications and write your question.

Score

To visualize the scoreboard, you should use Boca’s web portal:

- Open your browser
- Login with your team credentials (use the provided user and password).
- To go the **Score** tab to visualize the local score board.