



Maratona de Programação da SBC 2021

Sub-Regional Brasil do ICPC

October 30th 2021

Time Limits

The time limits are given in seconds:

Problem	C/C++	Java/Kotlin	Python
A	1.0	3.5	1.0
B	0.5	2.0	0.5
C	0.1	1.0	0.5
D	1.5	9.0	1.5
E	0.1	0.5	0.1
F	3.5	14.0	3.5
G	0.5	1.0	1.0
H	0.1	2.0	1.0
I	0.1	0.3	6.0
J	0.3	0.7	0.3
K	0.1	0.5	0.1
L	1.5	3.5	1.5
M	0.2	1.5	2.0
N	0.7	7.0	0.7

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++17: `g++ -g -O2 -std=gnu++17 -static -o {solution} {submission_filename}`

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.