**[Note]: Please note that the information in black was released on February 28, and the information in red was updated on March 14.**

**▌About Requirements:**

Q 1.1: Can I build up a team with members from other schools?

A 1.1: Yes, a cross-school team from the same contest division is allowed.

Q 1.2: Whether a PhD can participate in the contest?

A 1.2: Yes, all full-time undergraduates, graduates, and PhDs are welcomed.

Q 1.3: Can I participate in the contest on my own?

A 1.3: Yes. But a team with two or three members is preferred.

**▌About Contest Questions**

Q 2.1: Whether the topologies of each use case are the same?

A 2.1: No, the topologies of each use case are different.

Q 2.2: When will the advanced use cases be released?

A 2.2: Advanced use cases will be released between March 27 and March 31. The specific release time will be announced on the official website.

Q 2.3: Can I design a code mechanism for a specific use case?

A 2.3: Program design for a specific use case is forbidden for the sake of the quality and fairness of the contest. For example, no participant is allowed to guess the topology and make corresponding modifications based on the rating result of the program submitted previously. Otherwise, the participant will be disqualified.

Q 2.4: Can I use different algorithms based on different use case scales in the program?

A 2.4: Yes. Any program mechanism except those designed for specific use cases is allowed.

Q 2.5: Are the IDs of the network nodes and consumption nodes consecutive?

A 2.5: Yes, the IDs of the network nodes and consumption nodes are both consecutive integers starting from 0.

Q 2.6: Whether a server can be deployed on the network node that is directly connected to a consumption node?

A 2.6: Yes. Each use case has a solution, that is, you can deploy a server on the network node that is directly connected to a consumption node.

Q 2.7: What's the difference between the test cases and contest cases in the preliminary phase?

A 2.7: The use cases in the preliminary phase are classified into the following types: Test cases that can be downloaded publicly, test cases that used by the Online Judge (OJ) from the beginning of the contest to March 31, and contest use cases used by the OJ from April 1 to the end of the preliminary. Test cases are only for local debugging by the participants and helping participants understand the OJ. From April 1, the OJ adopts the official contest use cases and grades the preliminary result based on the latest programs submitted by the participants. Note that participants can modify and submit their programs before the end of the preliminary on April 5.

Q 2.8: How to define the third-party open source code?

A 2.8: The third-party open source code refers to the open source code that has been available before the contest, excluding the programming language STL. Any participants that use the third-party open source code will be disqualified.

Q 2.9: Is there any algorithm or related material available for reference?

A 2.9: The contest questions are of great challenge for there is no common algorithm for reference. Therefore, participants are expected to work out an excellent solution with their open mind.

Q 2.10: Will the contest mode be the same as that of last year?

A 2.10: No. This year will adopt a new contest mode. Please wait and see.

**▌About the Contest Judgment**

Q 3.1: Why the compilation failed after submission while the local compilation was successful?

A 3.1: Possible causes are as follows:

1. You did not use the UFT-8 code format which caused the Chinese comments displayed as invalid characters.

2. You did not use the JDK, an official version.

3. You did not submit your program in correct format. For details, see the readme file in the sdk package.

Q: Why was my program failed to be submitted?

A: The program fails to be submitted using the ff because the Firefox does not support the flash. You can submit your program through the Chrome or Internet Explorer.

Q 3.2: Whether the execution result of the program on the OJ can be provided for us to locate the fault if necessary?

A 3.2: No, the execution result cannot be displayed directly. There were participants who deliberately collect the test cases based on the execution result. However, you will see the calculation weight and total time consumption. For the programs that failed to get a normal result, the score is 0.

Q 3.3: What's the linefeed of the test cases?

A 3.3: The linefeed is 0x0a.

Q 3.4: Why my program always gets 0 point after the submission? Why the detail page is unavailable?

A 3.4: It is usually because the packaging format is incorrect. For details, see the format requirements in the readme file. In addition, the point will be 0 if the capabilities of the original SDK cannot be implemented.

Q 3.5: Why I cannot develop programs in the Windows operating system using the GNU Compiler Collection (GCC)?

A 3.5: You can compile and develop your programs in the Windows operating system. After commissioning in the Windows operating system is successful, you need to compile and commissioning the programs again in the Linux operating system, because the contest judgment is executed in the Linux operating system.

Q 3.6: Can I modify other files except the deploy file?

A 3.6: You are not advised to modify other files to prevent compilation exceptions. However, you can add a class to the same directory of the deploy files.

Q 3.7: Can I use the input and output functions written by myself?

A 3.7: You can use them as long as the output result format meets the requirements of the contest.

Q 3.8: What is the command format for executing a program?

A 3.8: The format is your\_exe\_file path/usercase.txt path/result.txt. The usercase.txt is a test case, and the result.txt is the output result. For details about the requirements, see the readme file in the root directory of the contest question package.

Q 3.9: Are the compilation options limited?

A 3.9: For object-oriented programmers, the interfaces used in the contest are executable programs. You can decide the compilation options on your own.

Q 3.10: Is parallel computing allowed?

A 3.10: The algorithm difficulty does not lie in the parallel algorithm. Parallel computing is not allowed because the environment regulated in the contest in the preliminary phase is a single-core server.

Q 3.11: In terms of program performance, is it a disadvantage for me if I use Java for programming? Will more time be given as compensation?

A 3.11:

a. Not too much Java features are used when you answer the contest algorithm question. The Java scripts generally run slower than those of the scripts written in C++/C because Java is an object-oriented (OO) language with the GC function. But the OO feature is not used in this contest question and the dynamic memory application is rarely involved.

b. The score will not be rated by performance unless the path weights are the same. There is a low probability that different algorithms have the same weights for complex use cases. If the weights are the same, the ranking of the participant who writes the program in Java will drop by one and the score reduces by 0.x. (If there are 10 thousand participants in the rank, dropping by one will loss only 0.01 point.)

c. Therefore, there is no appropriate way for compensation. Besides, too much compensation will be unfair to participants who use C++/C languages.

d. The JVM startup time is not calculated in the final runtime after the judgment program is updated.

Q 3.12: Is the MAC operating system is supported?

A 3.12: The MAC operating system is supported if you can create an executable program in the ubuntu14 environment.

Q 3.13: Why my program has not been started after submission?

A 3.13: The current contest judgment lasts at most three minutes. The database caching and updating interval of the website is 20 minutes. Now servers for the database are added and the refreshing time is planned to be three minutes (this will be implemented in the second half of March). Then, after the submission, you will see your answer about five minutes later.

Q 3.14: Can I develop the program in the Windows operating system?

A 3.14: You can compile and develop your programs in the Windows operating system. After commissioning in the Windows operating system is successful, you need to compile and commissioning the programs again in the Linux operating system, because the contest judgment is executed in the Linux operating system.

Q 3.15: The contest judgment details are unavailable and an error "run.sdk.execption" is displayed?

A 3.15: It is probably that something is wrong with the packaging format. You are advised to check it carefully based on the format requirements in the readme file.

Q 3.16: During code output, the exported code overwrites the previous one; therefore, it is inconvenient for code programming.

A 3.16: You can specify the output path based on different input cases.

Q 3.17: How the rankings and scores are specified?

A 3.17: The rankings are dynamic and the scores are relative. Each program that is submitted for a case has a ranking and is scored based on the ranking. Your ranking and score will be changed if a participant submits a program with optimized code.

Q 3.18: Why the score turns to 0 after submission?

A 3.18: It is probably because that the program runtime exceeds the specified time, that is, timeout. Then the score will be 0. Other causes may lie in the output result that does not meet the contest requirements, that is, the uplink and downlink bandwidth exceeds the maximum bandwidth. For example, if the maximum link bandwidth between A and B is 10 GB, the maximum link bandwidth of two directions (from A to B and from B to A) is 10 GB as well. Therefore, the total traffic volume of the link of two directions respectively cannot exceed 10 GB.

**▌Remarks:**

Check the directory structure of the compressed package before the submission, ensure that the file can be directly decompressed by right-clicking the package and choose **Extract Here**. For details about the directory structure, see the readme file in the SDK.

Save only one linefeed in the end of the program running result file.

If the format is correct but the score remains 0, post an article on the official forum, and tell us the upload time (the package upload time can be viewed on **Personal Center** > **My Competition**). We will check the logs to analyze the causes.

**▌For More Questions:**

For more questions, you can:

1. Ask questions on the official forum where experts will give your answers timely.

2. Communicate with experts in each regional QQ group. I will invite experts to this group and notify you of the communication time in WeChat.