AUSTRALIAN MATHS TRUST | AUSTRALIAN INFORMATICS OLYMPIAD

AIO Student Instruction Sheet

Competition format

There are 6 problems to be completed in 3 hours. Each problem contains several subtasks.

Submissions must be in one of the following languages:

- C11 (C language, 2011 standard)
- C++17 (C++ language, C++17 standard)
- Java 11
- Python 3 (3.9.19)

Before the competition

Students are encouraged to sign up to the AMT's Informatics Training Site and submit code for past AIO problems. Code will be marked automatically. All AIO programming languages are supported. Note that the AIO training site and the AIO competition use a different interface. Please use the practise contest page to practise using the AIO interface on the training site. Go to the AMT student competition portal to access the AIO on the competition day.

To start the contest

Log into the AMT student competition portal with the login details provided by your teacher.

Do not press the "Start!" button until all students are logged in and ready to begin and you have been instructed to commence by your teacher.

During the contest

- Question content is now available directly on the competition interface. You do not need a pdf to see the problems on the contest paper
- After pressing Start, you will see a homepage listing each question and its value. You can navigate directly to the questions from this page or from the panel on the left-hand side of the screen
- The homepage shows which questions have been answered, but not your score
- When you submit a solution, the competition system will automatically judge it against a set of secret test cases and award a score. This process may take some time; be patient and continue working
- At the bottom of each question page you will see all your attempted submissions with their score, status and compiler output (where applicable)
- To send a message to our support team, Click Ask a question on the left-hand side panel. You can continue working while waiting for a response
- When we respond a number will flash in the side panel to indicate outstanding messages
- Sometimes the support team will send an announcement to all participants. Notifications for announcements work the same as questions.

Trouble-shooting

Incorrect answers

Incorrect answers occur when there is a bug or a mistaken assumption in your solution.

Try testing your code against a variety of your own input files to see if you can spot the mistake.

Read the problem statement again to make sure you haven't missed any key details.

Important: Your program must be correct for all cases. If your program gets an incorrect answer for any of the test cases in a subtask, it will score zero points for that subtask.

It is better to write a slow program that is correct than a fast but inaccurate one. A slow solution is likely to solve at least one subtask and receive partial marks, while an incorrect or buggy solution is likely to score zero.

Common errors

Sometimes you will score zero even when you believe you have a working solution. Below are some common reasons that good solutions score zero.

- Incorrect Output Format
  - Example: The correct output for a problem is the single integer: 4.
  - The following outputs would be judged as incorrect:
  - The answer is 4
  - "4"
- Incorrect language selected from the drop-down box when submitting solution.
- Incorrect solution for only some of the judges' test cases within a subtask
- Program exceeds the time limit or produces a runtime error on even a single case
- Solution has accidentally been submitted for the wrong problem

The best way to avoid errors is to use the solution templates.

After the Contest

- Hand the hard copy paper back to your teacher immediately after the competition.
- Do not discuss the problems with other students or in public forums/discussions until the embargo date of Tuesday 2 September
- Results will be provided by your teachers when integrity checks have been completed, and results finalised.

Email: competitions@amt.edu.au
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Administration portal: https://competitions.amt.edu.au/admin/
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