

INFORMATION

Date	6 July 2023	Thursday
Time	09:00 - 13:00	4 hours
Venue	TWGSS CAL	A203 - A204

Without prior approval, participants are required to arrive **before 08:30**, late comers might be disqualified or a score penalty might be given.

GENERAL

- The **2022/23 Inter-house Coding Competition** is part of the overall 2022/23 Inter-house competition which aims to test coding skills of members of each house.
- Each house could nominate a team of students of their house to participate in this competition.
- Overall house score of the year would be added depending on the ranking in this competition:

Rank	1	2	3	4
Overall Score Added	20	15	12	10

FORMAT

- Participants would take a practical team competition.
- A team should consists of not more than 4 members.
- Each team is allowed to use one computer only.
- Each team would receive 4 sets of printed copy of the paper. The paper would also be visible on TWGSS Online Judge.
- The paper would consist of several programming problems. Each problem may carry different points. Each problem may be further divided into subtasks. Each subtask may carry different points.
- The whole paper would be in English only.
- The duration would be 4 hours.
- Participants are encouraged to work on the problems while they are not using the computer and communicate with teammates regarding the solutions.
- Communication within each team is allowed while communication between different teams is strictly prohibited.

SYLLABUS

- The syllabus of this competition would be the same as that of HKOI Senior Group (<https://hkoi.org/competition-syllabus>).
- The syllabus serves as a guide only. If deemed appropriate, problems may involve contents that are out of scope.

CODING

- Participants should answer in C++20.
- Participants might answer in other languages provided on TWGSS Online Judge, including Python 3.8.10. It is not guaranteed that the problems are solvable using those language.
- Participants might use any appropriate development software, including but not limited to the built-in code feature in TWGSS Online Judge, HKOI Online Judge “Code” feature, Visual Studio Code and Replit (not including any extensions and features that would give unfair advantages).

SUBMISSIONS

- Participants should submit their solution source codes through TWGSS Online Judge (<https://judge.twgss.org>). The system would automatically compile the source codes submitted by participants, then test the compiled programs using a set of data unknown to the participants.
- Unless specified in the problem, in order to score points for a subtask (or problem, if no subtasks in it), participants’ programs must be correct for all test cases in that subtask (or problem).
- Participants would receive feedback about their submissions, including the type of error first encountered (if any) for each subtask or problem.
- A team may submit at most once per problem per 60 seconds, and at most 50 times per problem.

RESULTS

- Highest score would be chosen from each subtask (or problem) to calculate the final score, those scores are not necessary from the same submission.
- Penalty scores may be given to teams for violation of rules.
- A team’s final score would be the sum of points received from all solved or partially-solved subtasks or problems minus the penalty score.
- A live scoreboard containing the total score and scores for each problem for each team would be available at the first-half (first 2 hours) of the competition. The scoreboard would then freeze until the end of the competition.
- Teams having higher total scores should have higher ranks.
- If two or more teams have the same score, they are ranked by the last submission that cause a score increase. The team with the earliest submission should have the highest rank.

OTHERS

- During competition, participants are allowed to seek clarification on the wordings of the problems. Should the condition deem necessary, the clarifications would be announced to all participants. Clarification related to the solutions would not be entertained.
- Time adjustment, rejudge of submissions and changes of problem statements might be announced anytime before, during, or after this competition and before the announcement of final results.
- Participants might refer to language-specific documentations enlisted on the “Reference” page of TWGSS Online Judge (<https://judge.twgss.org/reference>). For documentation of C++, viewing of the offline version of cppreference.com (<https://en.cppreference.com/w/Cppreference:Archives>) is allowed during competition.
- Participants might use any appropriate offline software that can be found on the computers, including but not limited to calculator, Microsoft Excel and Microsoft Paint. However, requests regarding the lack of certain offline software may not be entertained. A software is deemed inappropriate if unfair advantages are gained by using it in solving problems.
- Participants are not allowed to use of other online or offline resources, including but not limited to pre-written codes and AI software.
- Participants are not allowed to use other computers and electronic devices such as mobile phones and calculators for any purposes, including calculation, visualisation, gaming, or any other non-coding activities.
- Draft papers would be provided on demand.
- Participants are strongly advised to familiarise with the computer and TWGSS Online Judge coding environment before the competition.

Organisers of this competition reserve the final right to explain and alter the above rules.