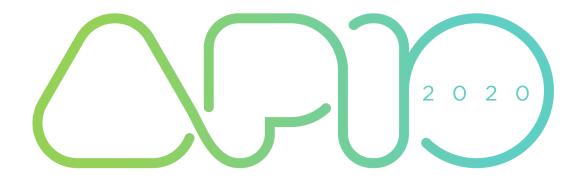# Asia-Pacific Informatics Olympiad 2020

Scientific Report

Scientific Committee

Asia-Pacific Informatics Olympiad 2020

September 2020

Abstract

The Asia-Pacific Informatics Olympiad (APIO) is an IOI-like competition for delegations within the Asian and Western Pacific regions. The first competition was organized by the Australian IOI team in 2007. APIO 2020 was hosted by Indonesia, held from Saturday, 15 August 2020 to Sunday, 16 August 2020. A total of 717 contestants from 33 countries participated in the contest, with 241 official contestants.

APIO 2020 Scientific Committee is responsible for the content of the competition, including the competition rules, tasks, and results. Competition tasks discussed in this report include task selection and task preparation process. This report also discusses competition result calculation and recommendation for future APIO and its regulation.

Contents

Abbreviations

APIO	Asia-Pacific Informatics Olympiad
ICPC	International Collegiate Programming Contest
IOI	International Olympiad in Informatics
OSN	Olimpiade Sains Nasional (National Science Olympiad)
TOKI	Tim Olimpiade Komputer Indonesia (Indonesian Computing Olympiad Team)

Scientific Committee

APIO 2020 Scientific Committee is composed of five experienced members in participating and organizing national and international programming contests:

1. The chair of the Scientific Committee is a current member of the IOI International Scientific Committee. He won a silver medal in IOI 2013 and participated in the ICPC World Finals 2015, a member of the APIO 2015 Scientific Committee, as well as the chair of the Indonesian National Olympiad in Informatics 2019 Scientific Committee.

2. The deputy chair of the Scientific Committee is the current coordinator of TOKI Regular Open Contest. He is also a member of the Indonesian National Olympiad in Informatics 2019 Scientific Committee, and is a member of the judge and the task author of The 2019 ICPC Asia Jakarta Regional Contest.

3. The third member of the Scientific Committee is a ICPC World Finalist 2020, which was deferred to 2021 due to the COVID-19 pandemic.

4. The fourth member of the Scientific Committee is an active TOKI task contributor. He won a gold medal in IOI 2019.

5. The fifth member of the Scientific Committee currently has the highest Codeforces rating in Indonesia. He participated in the ICPC World Finals 2018, and is a member of the judge and the task author of The 2019 ICPC Asia Jakarta Regional Contest.

Task Selection

Call for Tasks

APIO 2020 was originally scheduled to be held on Saturday, 16 May 2020. The Scientific Committee published a call for tasks on 6 February 2020 on the [APIO 2020 website](). When submitting a task proposal, the task author is required to submit the author's information (name, e-mail address, affiliation, country, and olympiad-role), task statement, and description of the desired solution. A call for tasks email is also sent to [toki-problem-authors@googlegroups.com](), which is a mailing list containing TOKI tasks authors. A call for tasks email is also sent to [ioi-announce@lists.ioinformatics.org](), which is a moderated mailing list for distribution of various announcements to the IOI community related to informatics olympiads.

The call for tasks was valid for approximately 5.5 weeks. It ends on Sunday, 15 March 2020, leaving approximately 2 months for the APIO 2020 Scientific Committee to select and prepare APIO 2020 tasks based on the original APIO 2020 schedule.

Tasks Selection

At the end of the 5.5 weeks, APIO 2020 Scientific Committee received 11 task submissions. Each member of the Scientific Committee reads the tasks to get the idea of each task. Additionally, each task is assigned to two Scientific Committee members. These members are responsible for assessing the difficulty and quality of the task, including understanding the full solution of the task and coming up with a list of possible subtasks.

A task discussion virtual meeting was held on Saturday, 28 March 2020 and Sunday, 29 March 2020. For each task, one of the two assigned members presents the tasks to the rest of the committee members.

The committee found that the author's solution for one of the task submissions is wrong, and the committee was unable to find a correct solution for the task. The committee also found that another task is too abstract, and the committee was unable to come up with a detailed task that is suitable enough for the APIO 2020 task. The committee decided to discard both tasks for the rest of the discussion.

For each of the remaining 9 tasks, the committee then evaluates the task based on the following metrics:

1. Difficulty: an estimated number of official contestants who will be able to fully solve the task.
2. Novelty of the task: A 1-10 scale rating of the novelty of the task.
3. Novelty of the solution/observation needed: A 1-10 scale rating of the novelty of the solution/observation needed to solve the task.
4. Subtasks: A 1-10 scale rating of the variety and quality of possible subtasks of the task.
5. Avoid zeroes: A yes/no metric whether the task is approachable by a less experienced contestant to gain a positive score from the task.

Based on the evaluation metrics, the committee then chooses three main tasks and two backup tasks, and agrees on the following tasks:

1. Main tasks
   a. Accident Average, modified by the Scientific Committee
   b. Painting Walls, modified by the Scientific Committee
   c. Swapping Cities
2. Backup tasks
   a. [Redacted]
   b. Fun Tour

The five combined tasks are the shortlisted tasks. Each task has a maximum score of 100 points. The preparation of the shortlisted tasks are discussed in the following section.

Task Preparation

Timeline

The task preparation was originally scheduled to be between Monday, 30 March 2020 to Sunday, 26 April 2020. However, due to the COVID-19 pandemic, it was decided on Wednesday, 8 April 2020 that APIO 2020 was postponed for three months. As a result, the task preparation was also extended to Wednesday, 22 July 2020.

Task Components

Scientific Committee prepares the following components for each task:

1. Task statement
2. C++ grader and skeleton
3. Model solution (C++)
4. Test case generator
5. Java grader and skeleton
6. Java solution
7. Input verifier
8. Output validator
9. Additional full solution
10. Solutions for each subtask
11. (Optional) Additional solutions with its corresponding intended verdict

Test case generator

Test case generator is written using [tcframe 1.6](#).

Input verifier

Input verifier is a standalone Python verifier (separated from the test case generator). It reads the input file from standard input and the 1-based subtask index from the first argument (argv[1]). It should exit gracefully and produce no output if the input is correct, and should crash if the input is not correct.

Output validator

Output validator follows tcframe scorer format.

Task Assignment

Each component is prepared by a member of the Scientific Committee. The first five components (task statement, grader and skeleton, model solution, and test case generator) are thoroughly reviewed by another member of the Scientific Committee. The assignee and the progress (whether it is WIP, to be reviewed, or completed) of each component is tracked in a shared spreadsheet. The reviewer of each of the first five components is also tracked in the same spreadsheet.

Most of the components are assigned on a first-come-first-serve basis, which means a member of the Scientific Committee can sign up to be assigned to the component by writing their name on the spreadsheet. Reviewers are assigned similarly. Several exceptions are explained later in this section.

Person In Change (PIC)

Each shortlisted task is assigned a PIC who is responsible for ensuring the quality of the task. Specifically, the PIC of the task is responsible to be aware of any changes related to the task. The PIC of a task is heuristically chosen based on familiarity. In particular, if an author of a task is a member of the Scientific Committee, the member is prioritized to be the PIC of the task.

Since there are the same number of shortlisted tasks and the members of the Scientific Committee, each member is the PIC of exactly one shortlisted task. This ensures each PIC has enough bandwidth to ensure the quality of their assigned task.

The PIC of the task is responsible for ensuring each component has an assignee and each of the first five components has a reviewer.

Public Components

Task statement and grader and skeleton are public files available to the contestants during the contest. Therefore, it is important to keep these components consistent within all tasks. The chair of the Scientific Committee is assigned to prepare these components for all tasks.

While preparing the task statement, the chair of the Scientific Committee also determines the constraint specification and subtasks based on the discussion during task selection and writes them in the task statement. If necessary, the chair of the Scientific Committee further discusses with the PIC of the task or the rest of the committee.

The PIC of the task is assigned to review the public components. If the PIC of the task is the chair of the Scientific Committee, a randomly chosen member of the Scientific Committee is assigned to review them.

Additional full solution

Since the purpose of an additional full solution is to ensure that the model solution produces a correct output, there has to be at least one additional full solution written independently from the model solution. This means that the writer of the additional full solution is different from the writer of the model solution.

Task Update

On 24 May 2020, a member of the Scientific Committee found a discussion in Codeforces about a task similar to the "Accident Average" task. In particular, the observation required to solve the majority of the task is present in the discussion. This was communicated to the rest of the Scientific Committee on 31 May 2020.

On 28 June 2020, a formal vote within the Scientific Committee was taken to decide whether to replace the task with a backup task on the basis of "one member, one vote". Each member can either choose to keep the current task, replace the task with the first backup task, replace the task with the second backup task, or abstain. The Scientific Committee unanimously agrees to replace the task with the second backup task, "Fun Tour".

Practice Session

On 28 June 2020, most of the task components for the "Accident Average" task were already prepared. Therefore, the committee agrees to use the task as a practice session task, subject to task author's approval. The committee received the task author's approval on the following day.

The chair and the deputy chair of the Scientific Committee also agree on two other tasks for the practice session. The tasks for the practice session are:
1. Accident Average (batch, standard scoring)
2. Organizing Party (interactive, standard scoring)
3. The Game of Pajel (output-only, creative scoring)

All the task and scoring types listed in the competition rules are represented in the tasks for the practice session. The last two tasks were based on past Informatics OSN tasks. Informatics OSN is also organized by TOKI.

All of the task components for all of the practice session tasks are prepared. Some task components are adapted from the original source.

Task Testing

After all of the task components are prepared and uploaded to the contest system, the tasks are tested by three independent testers who have not seen the tasks beforehand. The testers are experienced in participating national and international programming contests. All of the shortlisted as well as practice session tasks are available for testing.

The testing session is available from 25 July 2020. During testing, the testers found that the test data for two main tasks are too weak. In particular, the testers managed to write algorithmically flawed solutions that pass all the test data. The Scientific Committee fixed the issues by adding several test cases for both tasks. For one of the tasks, the Scientific Committee also modified the time limit and the constraint of the subtasks.

The task statement is also proofread by an independent native English speaker. The proofreader is familiar to two of the shortlisted tasks before proofreading the task statement.

Task Translation

An email was blasted to all delegation leaders on Thursday, 6 August 2020. The email contains credentials for the contestants from the represented country, as well as an instruction to reply to the email if the delegation leader wishes to translate APIO 2020 tasks to their own language. The email should also contain the intended language to be translated to. The committee will then give the credential to translate APIO 2020 tasks.

Task Statement Update

On Wednesday, 7 August 2020, a delegation leader clarified the meaning of the sentence "let $f(k)$ be the number of j such that the j-th contractor likes colour k". This sentence can be interpreted in two ways almost equally:

1. There are $f(k)$ contractors who like colour k.
2. The $f(k)$-th contractor likes colour k.

Since the correct interpretation is critical to solve the problem, the Scientific Committee decided to add an additional sentence. The Scientific Committee sent an email blast to all delegation leaders who have received a credential to translate APIO 2020 tasks, announcing the task statement update.

The Scientific Committee also decided to fix grammatical errors found in the task statement for the other two tasks.

Practice Session

The practice session is available for 7 × 24 hours starting from Friday, 7 August 2020 08:00 (UTC+7) to Friday, 14 August 2020 08:00 (UTC+7). The main purpose of the practice session is for the contestants to familiarize with the actual contest environment. All contestants can submit their submission during the whole week, regardless of when they start the practice session.

A total of 308 contestants from 32 different countries submitted at least one submission to the practice session. 275 of them get a positive score on the practice session.

Announcements

At the start of the practice contest, the following announcements were broadcasted at the practice session contest:

Welcome to APIO 2020 Practice Session. We hope the contestants are feeling well and excited to participate in APIO 2020, despite the current situation of the world.

Please use this practice session to familiarize with the actual contest environment. You may discuss the problems during the practice session. You may also submit a clarification request in English, although it will not be monitored as regularly as the actual contest. To be more helpful during the practice session, we may give answers other than the options specified in the contest rules.

There is no limit on the number of submissions during the practice session. However, each contestant may submit up to 50 submissions for each problem during the actual contest. Also, we trust the contestants to only use the account they are assigned to.

Due to the nature of the grader functions in APIO 2020 tasks, the following announcement was also broadcasted at the practice session contest:

In each problem in APIO 2020 (except for output only problems), you will only be asked to

implement one or more functions as specified in the problem statement. Therefore, your code **must not** have the `main` function, as well as any input/output interaction.

The attachment for each problem is linked at the end of the problem statement. The attachment contains the skeleton files, which you can use to code your function implementation. You will need to submit this file (the file containing the function implementation). The attachment also contains the public/sample grader, which you can use to test your code.

Clarification Request

A total of 30 clarification requests were received by the Scientific Committee during the practice session.

Seven of the clarification requests are regarding the contest system:

- Three of the clarification requests are regarding the meaning of the verdict for output-only problems.
- One of the clarification requests is a clarification whether the submission is allowed to print an output to the system error.

Competition

The competition window is open for 2 × 24 hours starting from Friday, 15 August 2020 08:00 (UTC+7) to Friday, 17 August 2020 08:00 (UTC+7). Each contestant can participate in the contest whenever the competition window is open. Each contestant has their "Start" button. Once a contestant clicks their "Start" button, their individual 5-hour timer will start and they can start reading APIO 2020 tasks, as well as submit their submissions.

Clarification Request

A total of 105 clarification requests were received by the Scientific Committee during the competition window. The clarification requests are actively monitored by the Scientific Committee during the whole 48 hours, and all clarification requests are answered in not more than 10 minutes.

Eleven of the clarification requests are regarding the formulation of the task "Swapping Cities":

1. Seven of them asked whether the car must stay at the destination city after it reaches the destination city.
2. Two of them asked whether the car must be at the destination city at the end of all movements.
3. Two of them asked whether the car vanished at the destination city.

All of the clarifications are legit clarifications. The answer to the clarifications is not answered in the task statement.

Four of the clarification requests are regarding the formulation of the task "Painting Walls":

1. Two of them asked the interpretation of the sentence "The contractor company will instruct the $((x + l) \bmod M)$-th contractor to paint the $(y + l)$-th segment, for $0 \le l < M$.". In particular, the clarification request asked whether the sentence is applied for all values of l in $[0, M)$ or applied for a single chosen value in $[0, M)$.

2. Two of them asked the interpretation of the sentence "Sum of $f(k)^2 \leq 400\ 000$". In particular, the clarification request whether "(Sum of $f(k))^2 \leq 400\ 000$" or "Sum of $(f(k)^2) \leq 400000$"

All of the clarifications are also legit clarifications. The answer to the clarifications is not answered in the task statement.

Four of the clarification requests are not written in English, which the Scientific Committee responded with "NO COMMENT". Eight of the clarification requests are due to the confusion between subtask and test group, which is addressed in the competition rules. Two of the clarification requests are due to the confusion of using the grader functions.

Contest Result

A total of 717 contestants from 33 different countries started the contest. A total of 510 contestants get a positive score. The committee decided to not remove the contestants who did not start the contest from the calculation. Out of the remaining 717 contestants, the contestant with the country rank of at most 6 is considered as an official contestant. In other words, a contestant is an official contestant if and only if the contestant starts the contest, and there are at most five other contestants from the same country who get a higher score than the contestant.

There are 241 official contestants, 18 of them get the full score. For 4 countries, there are more than six official contestants since less than six of the contestants from the country get a positive score, thus all of the contestants from the country are official contestants. This inflates the number of official contestants and the number of contestants winning a medal.

Based on APIO regulation, 23 official contestants (with at least 266 points) win gold medals, 38 official contestants (with at least 200 points) win silver medals, and 59 official contestants (with at least 96 points) win bronze medals.

Unofficial Result

The unofficial result, containing the individual task score for all 717 contestants, was sent to the delegation leaders on Monday, 17 August 2020. The unofficial result is sent together with an instruction to appeal the result.

Appeal

The appeal session is available until Thursday, 20 August 08:00 (UTC+7). The Scientific Committee received one appeal regarding a contestant who is unable to submit their submission before their timer ends due to a power outage. The committee decided to reject all

submissions not made through the contest system, thus rejecting the appeal, based on the following consideration:

- APIO 2020 is inherently an online contest, and the committee expected contestants to provide the local competition environment themselves.
- Throughout the contest, the contest system was stable and the committee did not detect any anomaly, slowness, or crash.

Official Result

On Friday, 21 August 2020, the full official result of APIO 2020, containing the individual task score for all 241 official contestants, was announced on the APIO 2020 website. There are no changes between the unofficial result and the official result. The result is available in the appendix.

The announcement of the official result concludes APIO 2020. All of the unused submitted tasks, including the unused backup task, is returned to the problem author.

Open Contest

APIO 2020 Open Contest has the same tasks and rules as APIO 2020. The open contest is available on the public TLX contest. Therefore, every TLX user is able to participate in the open contest.

The competition window for the open contest is open for 2 × 24 hours starting from Tuesday, 18 August 2020 08:00 (UTC+7) to Thursday, 20 August 2020 08:00 (UTC+7). Due to impracticality to monitor another 48 hours of contest, the Scientific Committee decided to disable clarification requests for the open contest.

A total of 344 contestants from 42 different countries started the contest. 128 of them get a positive score on the open contest. The full result of the open contest was announced on the APIO 2020 website on Friday, 21 August 2020.

Learning and Recommendation

As illustrated in task "Painting Walls", the Scientific Committee learns to avoid using the ambiguous phrase "number of" in task statements whenever possible. The Scientific Committee also learns to increase the number of task statement proofreaders, as there are still some errors and ambiguities found on the task statement after the task statements have been distributed for translation. The proofreaders should have not read any of the tasks before and they should undoubtedly understand the task after reading the task statement.

The Scientific Committee recommends to modify the current regulation of APIO regarding medal allocation. The current regulation has a loophole that a country is able to inflate the number of official contestants, thus inflating the number of contestants winning a medal as well.

The Scientific Committee also recommends to future APIO contestants, as well as to future APIO delegation leaders to ensure that their contestants:
- Read and understand the competition rules
- Participate in the practice session to familiarize with the contest system and the competition rules.

Appendix

Contest Result

Rank	Country	Name	Medal	Total	A	B	C
1	HKG	Leung Harris	Gold	**300**	100	100	100
1	RUS	Ildar Gainullin	Gold	**300**	100	100	100
1	CHN	Hao Hu	Gold	**300**	100	100	100
1	CHN	Kai Luo	Gold	**300**	100	100	100
1	IRN	Ali Safari	Gold	**300**	100	100	100
1	CHN	Bowei Zhang	Gold	**300**	100	100	100
1	IRN	Abolfazl Soltani	Gold	**300**	100	100	100
1	CHN	Zhe'an Xu	Gold	**300**	100	100	100
1	CHN	Yi Qian	Gold	**300**	100	100	100
1	GEO	Nika Birkadze	Gold	**300**	100	100	100
1	VNM	Bui Hong Duc	Gold	**300**	100	100	100
1	CHN	Mingyang Deng	Gold	**300**	100	100	100
1	KOR	Dit Bul Ban	Gold	**300**	100	100	100
1	CHN	Yulun Wu	Gold	**300**	100	100	100
1	CHN	Yufei Ye	Gold	**300**	100	100	100
1	CHN	Tingqiang Xu	Gold	**300**	100	100	100
1	CHN	Xin Zhou	Gold	**300**	100	100	100
1	ISR	Almog Wald	Gold	**300**	100	100	100
19	RUS	Egor Lifar	Gold	**266**	100	100	66
19	RUS	Timofei Fedoseev	Gold	**266**	100	100	66
19	IDN	Rama Aryasuta Pangestu	Gold	**266**	100	100	66

19	RUS	Alexander Shekhovtsov	Gold	266	100	100	66
19	JPN	Masataka Yoneda	Gold	266	100	100	66
24	RUS	Konstantin Frolov	Silver	247	100	100	47
24	RUS	Ivan Volkov	Silver	247	100	100	47
24	JPN	Yuki Tanaka	Silver	247	100	100	47
24	RUS	Andrei Efremov	Silver	247	100	100	47
24	RUS	Danila Usachev	Silver	247	100	100	47
24	RUS	Aleksandr Gagarin	Silver	247	100	100	47
24	RUS	Alesia Ivanova	Silver	247	100	100	47
24	IND	Kshitij Sodani	Silver	247	100	100	47
24	VNM	Vu Hoang Kien	Silver	247	100	100	47
24	IRN	Shayan Pardis	Silver	247	100	100	47
24	AUS	Junhua Chen	Silver	247	100	100	47
24	IRN	Kasra Mazaheri	Silver	247	100	100	47
24	IRN	Ali Shahali	Silver	247	100	100	47
24	VNM	Le Quang Huy	Silver	247	100	100	47
24	IRN	Arshia Ataei	Silver	247	100	100	47
24	JPN	Hirotaka Yoneda	Silver	247	100	100	47
24	KOR	Onjo Lee	Silver	247	100	100	47
24	JPN	Rintaro Matsuo	Silver	247	100	100	47
24	RUS	Dmitrii Umnov	Silver	247	100	100	47
43	KOR	Seo hyun Choi	Silver	226	100	100	26
43	IDN	Nicholas Patrick	Silver	226	100	100	26
43	ISR	Noam Licht	Silver	226	100	100	26
43	KAZ	Taimas Korganbayev	Silver	226	100	100	26
43	KOR	Taehwan Jang	Silver	226	100	100	26
43	KOR	Jihun Kim	Silver	226	100	100	26

43	IDN	Pikatan Arya Bramajati	Silver	226	100	100	26
43	MYS	Yeoh Zi Song	Silver	226	100	100	26
43	JPN	Akihito Yoneyama	Silver	226	100	100	26
52	KOR	Eunsoo Choe	Silver	220	100	73	47
53	GEO	Luka Mushkudiani	Silver	210	100	100	10
53	JPN	Daiki Kodama	Silver	210	63	100	47
53	SGP	Benson Lin Zhan Li	Silver	210	63	100	47
53	GEO	Teimuraz Toloraia	Silver	210	100	100	10
53	IND	Udit Sanghi	Silver	210	63	100	47
53	BGD	Tasmeem Reza	Silver	210	100	100	10
53	VNM	Tran Quang Thanh	Silver	210	100	100	10
53	IND	Shashwat Chandra	Silver	210	63	100	47
61	VNM	Nguyen Dinh Phuc	Silver	200	100	100	0
62	PHL	Dan Alden Baterisna	Bronze	197	100	50	47
63	SGP	Daniel Choo Zhenghao	Bronze	193	63	30	100
64	SGP	Tan Si Jie	Bronze	189	63	100	26
65	ARM	Aleksandr Abelyan	Bronze	187	40	100	47
66	SGP	Ashley Aragorn Khoo	Bronze	183	63	73	47
67	GEO	Giorgi Nadareishvili	Bronze	177	51	100	26
67	SGP	Lim Rui Yuan	Bronze	177	100	30	47
67	VNM	Dao Quang Thai Duong	Bronze	177	100	30	47
70	AUS	Joshua Chen	Bronze	176	100	50	26
70	IDN	Muhammad Irham Luthfi	Bronze	176	100	50	26
70	HKG	Yuen Lok Kan Ethen	Bronze	176	100	50	26
70	KAZ	Parassat Kyzyrkanov	Bronze	176	100	50	26
74	IND	Rajarshi Basu	Bronze	166	40	100	26
74	AUS	Tunan Shi	Bronze	166	40	100	26

74	SGP	Leong Eu-Shaun	Bronze	**166**	40	100	26
77	GEO	Beso Managadze	Bronze	**163**	63	100	-
78	TWN	Guan-Chen Chen	Bronze	**160**	63	50	47
78	ARM	Samvel Andreasyan	Bronze	**160**	40	73	47
78	IDN	Edbert Geraldy Cangdinata	Bronze	**160**	100	13	47
81	IND	Soumyaditya Choudhuri	Bronze	**156**	100	30	26
82	IND	Utkarsh Agrawal	Bronze	**154**	28	100	26
83	ARM	Emil Kostanyan	Bronze	**151**	51	100	-
84	SAU	fares ibraheem basuni	Bronze	**150**	51	73	26
85	TWN	Elliot En-Yi Liu	Bronze	**146**	63	73	10
86	TWN	Ping-Hsuan Lin	Bronze	**141**	15	100	26
87	GEO	Archil Basadzishvili	Bronze	**140**	40	100	0
88	IDN	Maximilliano Utomo Quok	Bronze	**139**	100	13	26
88	HKG	Ng Yau Fu	Bronze	**139**	100	13	26
88	MAC	Cheng U Ian	Bronze	**139**	100	13	26
88	HKG	Yeung Man Tsung	Bronze	**139**	63	50	26
88	AZE	Murad Eynizada	Bronze	**139**	100	13	26
88	HKG	Cheng Hei Chit	Bronze	**139**	63	50	26
88	TWN	Hsin-Wei Hou	Bronze	**139**	63	50	26
88	ARM	Arayi Khalatyan	Bronze	**139**	100	13	26
88	HKG	Wai Ka Hei	Bronze	**139**	63	50	26
88	ISR	Daniel Agassy	Bronze	**139**	100	13	26
98	THA	Jirawut Thongraar	Bronze	**137**	100	37	-
98	TWN	Jhao-Wei Fan	Bronze	**137**	40	50	47
100	AUS	Quang Ong	Bronze	**134**	51	36	47
101	TWN	Cheng Hao Yang	Bronze	**133**	100	7	26
102	THA	Pimrak Apiratchatanont	Bronze	**132**	100	6	26

103	PHL	Dion Stephan Ong	Bronze	**126**	63	37	26
103	BGD	Mamnoon Siam	Bronze	**126**	-	100	26
105	AZE	Aziz Huseynov	Bronze	**123**	63	13	47
106	AUS	Jerry Li	Bronze	**121**	-	100	21
107	TJK	Nodir Bobiev	Bronze	**116**	40	50	26
107	SYR	Ahmad Haidar	Bronze	**116**	63	6	47
107	KAZ	Zhambyl Maksotov	Bronze	**116**	40	50	26
107	TJK	Muhammad Hokimiyon	Bronze	**116**	40	50	26
111	ISR	Omer Ronen	Bronze	**113**	63	50	0
112	MYS	Amos Tan Li Sheng	Bronze	**107**	100	7	-
113	SAU	Mohammed Alrefaei	Bronze	**104**	28	50	26
114	SYR	Beshr Islam Bouli	Bronze	**102**	63	13	26
114	ISR	Alon Dayan	Bronze	**102**	63	13	26
114	SYR	Mohammad Nour Massri	Bronze	**102**	63	13	26
117	KAZ	Timur Ratnikov	Bronze	**100**	63	37	-
117	ISR	Gonen Gazit	Bronze	**100**	63	37	-
119	KGZ	Shabdan Batyrkulov	Bronze	**96**	63	7	26
119	MAC	Fan Meng Hong	Bronze	**96**	63	7	26
121	KAZ	Dinmukhamed Tursynbay		**95**	63	6	26
121	NZL	Zhiyuan Qi		**95**	63	6	26
123	AUS	Isaiah Iliffe		**90**	40	50	0
123	AUS	Andrew Kerr		**90**	0	43	47
123	MYS	Heng Hau Ye		**90**	40	50	-
126	UZB	Azimjon Urinov		**89**	63	0	26
127	BGD	Al Amin Tushar		**88**	12	50	26
127	KAZ	Mansur Mukimbekov		**88**	28	50	10
129	SYR	Abdulrahman Ahdali		**83**	51	6	26

130	MYS	Chooi Je Qin		**79**	40	13	26
130	MYS	Tan Li Xuan		**79**	40	13	26
130	PHL	Steven Reyes		**79**	40	13	26
130	SYR	Philip Aji		**79**	40	13	26
130	MNG	Nyamdavaa Amar		**79**	-	13	66
135	NZL	Ivan Solovyev		**76**	-	50	26
135	TUR	Ege Kabasakaloglu		**76**	63	13	-
135	BGD	Shafin Alam		**76**	-	50	26
135	PHL	Fredrick Ivan Tan		**76**	63	13	-
139	MAC	Tongsam Zheng		**73**	40	7	26
139	MAC	Hoi Wan Li		**73**	63	0	10
141	THA	Touch Sungkawichai		**72**	40	6	26
141	BGD	Shafin Ahmed		**72**	40	6	26
143	MNG	Bilguudei Shinezul		**69**	63	6	0
144	THA	Kanin Suphap		**67**	51	6	10
144	THA	Sirawit Pongnakintr		**67**	28	13	26
146	BGD	Munim Hasan Wasi		**63**	63	-	0
146	ARM	Davit Margaryan		**63**	40	13	10
148	MYS	Kenneth Yong Hau Woon		**62**	12	50	-
149	LKA	Nishshankage Lakshith Kanchana Nishshanke		**60**	28	6	26
150	KGZ	Islam Davletov		**54**	28	-	26
151	PHL	Raphael Dylan Dalida		**53**	40	13	0
151	TUR	Taha Ensar Kukul		**53**	40	13	-
151	THA	Pontakorn Prasertsuk		**53**	0	6	47
154	KGZ	Omurbek Dzhamalov		**51**	51	0	0
154	PSE	Mohamad Alaa Rafiq Milhem		**51**	12	13	26
154	SYR	Saleh Rabea		**51**	12	13	26

157	KGZ	Arthur Aidarov		**50**	40	0	10
158	MNG	Badrangiikh Batorgil		**46**	40	6	0
158	MNG	Khangal Battur		**46**	40	6	-
158	NZL	Joseph Grace		**46**	40	6	-
161	TUR	Atakan Yasar		**40**	40	0	-
161	MAC	Wai Seng Kou		**40**	40	-	-
161	AZE	Emin Orucov		**40**	40	-	-
164	MAC	Iat Long Iong		**39**	0	13	26
164	PSE	Basil Hatem Ameen Hijaz		**39**	0	13	26
164	AZE	Abutalib Namazov		**39**	-	13	26
164	AZE	Ibrahim Taghizade		**39**	0	13	26
168	NZL	Maayan Levy		**37**	-	37	0
169	LKA	Sithija Abhishek Kotuwewatta		**34**	28	6	-
170	TUR	Ahmet Kaan Avci		**33**	-	7	26
171	MNG	Erkhemkhuu Basan		**32**	-	6	26
172	KGZ	Damirbek uulu Abil		**28**	28	-	-
172	KGZ	Asylbek Ismailov		**28**	28	0	-
172	TKM	Suleyman Atayev		**28**	28	0	-
175	AZE	Huseyn Hajiyev		**26**	-	0	26
175	SAU	Raya Yahya Abu aljamal		**26**	0	0	26
175	LKA	Navida Mindiya Karunasinghe		**26**	0	0	26
175	TUR	Yunus Gurlek		**26**	-	0	26
175	UZB	Javokhir Akromjonov		**26**	-	-	26
180	MNG	Orgilbold Luvsandorj		**18**	12	6	-
181	UZB	Yan Evzman		**13**	-	13	0
181	LKA	Thuwaragesh Jayachandran		**13**	-	13	-
183	ARM	Amaras Nasarians		**12**	12	0	-

184	TJK	Dilshod Imomov		**7**	-	7	-
184	PSE	Nicola Nader Nicola Abusaad		**7**	-	7	-
184	TKM	Gurbanberdi Gulladyyev		**7**	-	7	-
187	SAU	Abdullah Alwani		**6**	0	6	0
187	PSE	Ruba Moneer Tayseer Katout		**6**	-	6	0
187	SAU	Mohammed Sadiq Alsaad		**6**	0	6	-
187	LKA	Wickramasinghe Arachchige Chirath Nirodha		**6**	0	6	0
187	LKA	Rajamohan Apiram		**6**	0	6	0
187	LKA	Dulina Herath		**6**	-	6	-
187	LKA	Dulina Sandhadev Hiyarapitiya		**6**	-	6	-
194	TKM	Dovlet Odeberdiyev		**0**	0	0	0
194	TKM	Muhammetali Ashyrmuhammedov		**0**	0	0	-
194	PHL	Mark Nicholas Cagas		**0**	0	-	0
194	PHL	Malks Mogen David		**0**	0	0	-
194	PHL	Kian Colin Chua		**0**	0	0	-
194	PSE	Salma Zaher Refat Salman		**0**	0	-	0
194	PHL	Rheana, Mindo		**0**	0	-	-
194	TUR	Bora Calim		**0**	-	0	-
194	PHL	Joshua Figueroa		**0**	0	-	-
194	TKM	Dovran Akmyradov		**0**	-	0	-
194	TJK	Toho Habibullo		**0**	0	-	-
194	TKM	Dovletgeldi Karayev		**0**	-	0	-
194	PHL	Adriel Neyro Caraig		**0**	0	-	-
194	PHL	Kim Isiah Falogme		**0**	0	-	-
194	PHL	Edric Luis Ato		**0**	-	0	-
194	TKM	Dayanch Berdihanov		**0**	0	-	-
194	PHL	Sean David Magbanua		**0**	0	-	-

194	TKM	Batyr Ishanov		**0**	0	-	-
194	TUR	Mesut Melih Akpinar		**0**	-	0	-
194	TJK	Alisher Kamolov		**0**	-	0	-
194	PHL	Kurt Princip Gavryl Sumallo		**0**	0	-	-
194	TKM	Kakamyrat Kervenov		**0**	-	0	-
194	PHL	Daniella Joan Francisco		**0**	0	-	-
194	PHL	Arvin Jayson Arenas		**0**	0	-	-
194	TKM	Arslan Ezizov		**0**	0	-	-
194	PSE	Mohammed Hatem Ameen Hijaz		**0**	0	-	-
194	PHL	Walter Go		**0**	0	-	-
194	SAU	abdulmohsen hamed mohammedsaleh		**0**	-	-	0
194	TUR	Ahmet Atilla Ak		**0**	-	-	0
194	PHL	Al Christian Mabute		**0**	0	-	-
194	SAU	almothana alzahrani		**0**	0	-	-
194	TUR	Cengiz Eray Aslan		**0**	-	-	-
194	PHL	Jose Miguel Leysa		**0**	-	-	-
194	TKM	Akram Matyazov		**0**	-	-	-
194	TUR	Halit Tugra Celik		**0**	-	-	-
194	PHL	Chlod Aidan Alejandro		**0**	-	-	-
194	TKM	Hojamyrat Eyeberdiyev		**0**	-	-	-
194	TUR	Erkam Uysal		**0**	-	-	-
194	PHL	Allan David Gavica		**0**	-	-	-
194	TJK	Afraimov Binyomin		**0**	-	-	-
194	TUR	Mehmet Kutay Bozkurt		**0**	-	-	-
194	UZB	Usmonkhon Rakhimov		**0**	-	-	-
194	SAU	Yaser Faisal Balamash		**0**	-	-	-
194	PHL	Zaki Jeremy Abaran		**0**	-	-	-

194	TKM	Mustafa Rozyyev		**0**	-	-	-
194	PHL	John Regulus Dipasupil		**0**	-	-	-
194	PHL	Rafa Judah Tirones		**0**	-	-	-
194	PHL	Kirsten Dianne Delmo		**0**	-	-	-