



الجامعة الإسلامية العالمية ماليزيا  
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA  
يُونِيسْكَو: اِسْلَامٌ اِنْتَابًا اِبْعَسًا مِلْدِسِيَا

Company No. 101907 P

Garden of Knowledge and Virtue

**LEADING THE WAY**

KHALIFAH • AMĀNAH • IQRA' • RAHMATAN LIL-ĀLĀMĪN

asia pacific  
& southeast



**icpc**

International Collegiate  
Programming Contest

[icpc.foundation](http://icpc.foundation)

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programming tools

Organized by

Kulliyah of Information  
& Communication  
Technology,  
International Islamic  
University Malaysia

# International Collegiate Programming Contest Asia Regional Kuala Lumpur

## NOV 8 – 10, 2019





# International Collegiate Programming Contest Asia Regional – Kuala Lumpur



## Technical Briefing

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November 8-10, 2019

# Contest Area

- 2<sup>th</sup> floor, Room: 13, 14.
- All contestants and coaches should wear the provided contest T-shirt as an outer-most garment at all time.
- Any additional clothing must be worn underneath the contest T-shirt.

# Refreshments & Toilet

- Refreshments (snacks and drinks) are during the contest.  
Enjoy!
- Please ask the committee in your room if you need to go to the toilet.

# Seating, Username, Password

- Username, password and seating arrangement for each team will be different between practice session (1<sup>st</sup> day) and the contest proper (2<sup>nd</sup> day).
- Username and password will be given to each team before the contest along with the problem-set.

# Items

Teams may bring these items into the contest room on the contest day.

- Team Notebook
  - ✓ contains up to 25 (single sided) pages of reference materials.
  - ✓ must be readable by a person with correctable eyesight without magnification from a distance of 1/2 metres
  - ✓ put your team name and university on the first page.
  - ✓ leave them on your team's table after **practice session**.

# Items

Teams may bring the following items into the contest room on the contest day.

- Additional blank papers and graph papers
  - ✓ leave them on your team's table after **practice session**.
  - ✓ blank papers will also be provided by the committee.
- Stationery
  - ✓ pens, pencils, rulers, etc.
- Dictionary
  - ✓ hard-copy
  - ✓ leave them on your team's table after **practice session**.

# Items

Teams are **NOT ALLOWED** to bring the following items into the contest room on the contest day.

- Any electronic/digital devices
  - ❖ Flash-disk, HDD, Mobile-phone, Smartphone, Smart-watch, Calculator, Laptop, etc.

You can put all your stuffs in the corner of the contest rooms.



# Computing Environment

- Each team will be provided with a single computer.
- All teams and judges will have an equivalent computing environment.

# Computing Environment

- **Hardware**

- DELL Optiplex 9010
- - Intel Core i7 3770 16GB RAM
- - 500GB HDD
- - Dell 21.5' inch Monitor
- - Keyboard & Mouse (Wired)

- **Software**

- OS Ubuntu 18.04.3 LTS Linux (64-bit)
- Contest Application DOMjudge
- Language (Compiler) C, C ++, java and Python
- Text Editor vi, nano, emacs, gedit, ge
- IDEs Eclipse, Clion, Code-Block, Idea and PyCharm

## IMPORTANT!

- Save your files in any directory under **\home\ipccontestant\workspace\**
- All computers are NOT in frozen-mode.
- If the computer restarts, the login-id is **icpccontestant**, the password is **icic2019**.

# Problem set

- There are 10 problems (A to J).
  - Any problem corrections as well as time limit for each problem will be stated in the problem set.
  - The link is **<http://scoreboard.iium.edu.my/icpckl2019/public>**
- Each problem is printed on separate pages (total: 16 pages)
- Each team will receive an envelope which contains 2 copies of the problem set.

# Start of Contest

- Before the contest is started
  - Team **MAY NOT** open the problem-set envelope.
  - Team **MAY NOT** touch the keyboard.
- **The committee will announce if the contest is started**
- Team may open the problem set envelope and start working.
  - ✓ There's no need to wait further instruction.

# Submission

- Teams should submit their solutions via DOMjudge team page.
- Make sure you choose the correct problem and language.

# Judge's Response

**CORRECT**, accepted solution.

- The corresponding problem is considered solved.

**COMPILER-ERROR**

**MEMORY-LIMIT**

**TIMELIMIT**

**RUN-ERROR**

- do not forget to `return 0` at the end of your `main` function (C/C++)
- missing or different return statement may result in RUN-ERROR

**NO-OUTPUT**

**WRONG-ANSWER**

# Balloon

Each **CORRECT** problem will get a balloon!

Intimidate your competitor ☺

DO NOT pop the balloons ...





# Clarification

- Team may submit clarification requests to the judges via DOMJudge.
  - It's better to submit only questions related to the problem set.
  - Question related to the workstation or other logistics can be addressed directly to the committee in your contest room.
  
- If the judges agree that an ambiguity or error exists in the problem set, a clarification will be issued to all teams.

# Printing

- All files will be printed as **RAW TEXT FILE** (don't send images).
- A print-runner will bring the print results to your team.
  - From the editor or IDE select print.
  - Asked to DOMjudge clarification if any issues arise.

# Scoring

- **TOTAL TIME** is the sum of the time consumed for each solved problem.
- The **time consumed for a solved problem** is:
  - the time elapsed from the beginning of the contest to the submittal of the first accepted solution.
  - **20 penalty minutes for every previously rejected solution** (except **COMPILE-ERROR**) for that problem.
- There is no time consumed for a problem that is not solved.

# Scoreboard

- Scoreboard will be displayed on the screen in each room and teams can also view the scoreboard from their computers.
- Scoreboard will be frozen (not be updated) in the last hour of the contest.
  - Balloons also will not be distributed.
  - Teams still get responses from judges.
- Link of scoreboard
  - **Contest.iium** for a local link
  - **<http://scoreboard.iium.edu.my/icpckl2019/public>** for public link
  - we will broadcast from the beginning of the competition through DOMjudge

# Fair Play

You might be disqualified for any activity that jeopardised the contest, including (but not limited to):

- ❖ hacking attempt,
- ❖ cheating,
- ❖ dislodging cords,
- ❖ distracting behaviours,
- ❖ etc.

# Others

- Only contestants, judges and committee members are allowed to be on the 2<sup>rd</sup> floor **on the contest day** (checked by T-shirt).
  - Coaches are not allowed to be on the 2<sup>rd</sup> floor.
- Coaches can observe the live scoreboard and will be given a copy of problem-set in the auditorium.
- Smoking is prohibited in any area of IIUM campus.

Questions?

# Problem-setters

1. Shahriar Manzoor – Southeast University, Dhaka
2. Mina Magdy – Google Munich, Germany
3. Masum Nayeem – Dhaka
4. Mohammad Yaseer – R&D Swvl, Cairo
5. Muhammad Amirul Ashraf – Grab Malaysia
6. Rizal Mohd Nor - IIUM
7. Jeremy Lest - Univ Maranatha, Bandung.



# Judges

1. Prof. Dr. Teddy Mantoro (Sampoerna Univ) (Chief Judge).
2. Dr. Rizal Mohd Nor (IIUM).
3. Marini (UKM).
4. Felix Jingga (Binus, Jakarta, Indonesia).
5. Muhammad Amirul Ashraf – Grab Malaysia.

Enjoy and Good Luck