INTER-HOUSE PROGRAMMING
INSTRUCTIONS FOR PARTICIPANTS

General Information:

1. There will be 2 separate age categories: 9th-10th and IB. There will **not** be separate categories for boys and girls.
2. This event will be conducted on HackerRank (an online programming platform) and participants will be supervised on an MS Teams Call by Student Council Members.
3. Participants will be provided with the link to join the MS Teams meetings for the competition by their respective House Councils.
4. The dates of the event will be Tuesday (the 30th) and Wednesday (the 31st). House Councils will inform participants of specific timings shortly.
5. Only the languages of Python and Java will be available for participants to use.
6. Participants must be familiar with operating the HackerRank platform prior to the contest.

Things to do prior to the event:

1. Participants will have to create a HackerRank account
    a. Go to https://www.hackerrank.com/auth/signup OR Go to https://www.hackerrank.com/ and click on "Sign Up & Code"
    b. Enter your first and last name, your password and your email address. Note that this should be your school email address.
    c. You will have to **confirm your email address**. HackerRank provides instructions on how to do this once you have signed up.
    d. Once you have logged in, click on your username in the top right hand corner. In the dropdown menu, select "Settings". You will see an option to change your username
    e. Change your **username** to the format "Name_Surname_HouseInitial". For example, for Shiv Kampani from the Tiger house, the username will be: **Shiv_Kampani_T** (Use P, J, and L for Panthers, Jaguars and Lions respectively)
    f. Once you have typed in your new username, click on "Save Changes" on the left side panel.
2. Participants will have to "Join" the HackerRank contest created by the Core Council. The link to this contest will be sent to participants prior to the event.
3. Participants must know how to write programs in **at least one of the following languages:**
    a. Python
    b. Java
4. Participants must know how to **input** and **output** data in the language of their choice. If participants do not know how to do this, the following resources may be useful:

    a. Python - input() and print()
        i. https://www.hackerrank.com/challenges/python-raw-input/tutorial
    b. Java - Scanner Class
        i. https://www.hackerrank.com/challenges/java-stdin-and-stdout-1/problem
        ii. https://www.hackerrank.com/challenges/java-stdin-stdout/problem
5. It is **highly recommended** that participants familiarize themselves with HackerRank's code editor and interface before the competition.
    a. This resource may be useful: https://www.youtube.com/watch?v=Unu6bDJ1pEI
    b. Unlike what is shown in this video, there will be no input/output code snippets for the problems you receive in the contest (there will be a blank editor). Participants will have to write input and output code on their own.
    c. Only Java and Python will be offered to participants.
6. Participants are requested to join the team (link sent by house captains) **one or more days prior to the event**.
7. If participants have any questions before or after the event, they are requested to message their House Captains on Whatsapp or via teams.

Important points for the event day:

1. Participants must ensure that they have:
    a. A laptop with a stable internet connection
    b. A secondary device with a functional camera that can log into MS Teams
    c. A clear workspace
2. Participants must join the MS Teams call at a designated time on the event date, following which they must set up their secondary camera and log into HackerRank. After logging in, participants should go to the contest link provided to them earlier.
3. The secondary camera must be placed in a manner that allows supervising council members to view the participant's full screen.
4. The contest **will automatically end** in exactly one hour from the start time, after which no submissions will be accepted. As soon as participants submit their solution for a problem, they will receive a score for their submission.
5. Participants **may** also carry:
    a. Sheets of blank paper or loose sheets for rough working
    b. Writing Implements (pens and pencils)
    c. A copy of this document that is **not** annotated
6. At any sign of **malpractice**, the participant will be immediately disqualified from the event. Three important points for malpractices include:
    a. Participants must remain on the HackerRank tab of their web browser at all times; using other features of the web browser, opening new tabs or searching for solutions is strictly **prohibited**.

b. Participants are only allowed to submit **one** solution for each problem. Participants will be allowed to test their code against custom input (using the "Run Code" button) but will only be allowed to "Submit Code" once.
c. Participants **must** use HackerRank's online code editor and **cannot** use local IDEs or text editors to write/debug programs.

Scoring Criteria:

- The contest consists of six problems, which will each be scored out of 100 points.
- These problems will have increasing difficulty and participants will only be given one hour to solve all 6.
- Only **one** submission to each problem will be considered. If this is a compilation error, the participant's score for that problem will be recorded as 0.
- Participants can write their own test cases for their programs within the HackerRank editor, to test their code before submitting.
- In case of a tie, the following factors will be considered **in order**:
    - Sum of runtimes for each solution - each problem will have a certain number of test cases. HackerRank gives the time in seconds for the submitted program to complete each test case. The sum of these times gives the "runtime" for the programmer's solution to the challenge. The sum of all of these runtimes is considered. A participant with a lower sum of runtimes will be considered over one with a higher sum.
    - Sum of times taken by a participant for all solved problems - this refers to the actual time (in minutes) that the student has taken to write the code and submit it.

Protocol for Internet Failure

- In the event that a participant's internet fails, they will be given 5 minutes to rejoin the Teams meeting.
- They **must** inform their respective house captain(s) **immediately**.
- In the event that they are unable to do so in time, any submissions they make after their internet fails will not be counted towards their score. All problems solved prior to internet failure will be counted towards their score; they will **not** be disqualified.