Ice - Breakers

- Introductions
- Brief about contingent
  - We are aiming to participate in different competitions like
    - SMMC
    - IMC
    - MCM
    - ICM
    - NSUCRYPTO
    - SEEMOUS
    - SCUDEM
    - CMI, IISC and IIESR annual competitions.
  - If there are restrictions on number of participants from a university a subset of us will be attending the competition based on expertise in the domain of that competition.
  - And the contingent will be rolling. So only for active members in terms of discussions and problem solving.
  - WhatsApp Group all important messages should be acknowledged.
  - We will figure out how to keep track of progress ideas are welcome.
  - The idea is we will prepare for the math competitions weekly problem sets will be provided and you are also supposed to make problem sets.
  - If most of us feel like having a session on a particular topic would be helpful, one of us good at that topic can take it up or we can have help from seniors or someone to get the basics of it.
  - 18 people in the contingent so lets form 6 groups of 3 members and each group will be making problem sets on a rolling basis.
  - So roughly each person is supposed to gather 3 questions in a time span of 6 weeks (not in the first round tho, try making or gathering good questions).

    - The problem sets are supposed to maintain standards as you are getting a lot of time.
    - Should be actively participating in the discussions and knowledge sharing.
- One Nice Question : Among 25 people, any five of them can form a committee. It is known that any two committees have at most one person in common. Prove that there are at most 30 committees.
- One more Nice Question (by Madhav) : 200 students participated in a maths competition. The contest consists of 6 problems to solve. It is known that every problem was solved correctly by at least 120 participants. Then prove that there must be 2 participants such that every problem was solved by at least one of them.
- One more Nice Question (Upgraded version by me): 200 students participated in a maths competition. The contest consists of 6 problems to solve. It is known that every problem was solved correctly by at least “x” participants. It is known that there are 2 participants such that every problem was solved by at least one of them. Then find the minimum possible value of “x” so that the given condition holds.
- Try looking at Simon Marais previous year problems and making questions.
- The first problem set will be released this weekend.
- Let us decide upon a timing so that we can have a fixed time slot for contingent every week (to be decided).
- Read about double counting principles and try solving problems on it.