Introduction

COL 106: Data-structures

Instructor :

Mausam (mausam@cse.iitd.ac.in)

Course web-page:

www.cse.iitd.ac.in/~mausam/col106/autumn2017

Logistics

- Timings: Tue/Thu/Fri 11-12

- Office hours
  By appointment

- Course Website:
  www.cse.iitd.ac.in/~mausam/courses/col106/autumn2017

- Join discussion group on Piazza (access code: col106)
  https://piazza.com/iit_delhi/fall2017/col106/home

Data-structures

Teaching assistants:

TAs will help resolving any problems regarding the course :

coding, understanding a particular concept, assignments, etc.

Practice sessions: ~once in a week

Evaluations components

- Minor Exams : 20% each
- Assignments : 25% (~5 + 1 Java lab)
- Major exam :   35%
- Extra credit: constructive class participation, and discussion group participation

Audit criteria: audit not allowed

Programming Assignments

- 5 programming assignments

  - ☐ 1-2 assignments may be done in teams of two
    - no team can be repeated for a second assignment

  - ☐ late policy (penalty of 10% every day)
    - up to three days late

Grading and Academic Integrity

- Academic Integrity
  - Cheating $\rightarrow$ negative penalty (and possibly more)
    - Exception: if one person/team is identified as cheater
      - Non-cheater gets a zero

- Collaboration is good!!! Cheating is bad!!! Who is a cheater?
  - No sharing of part-code
  - No written/soft copy notes
  - Right to information rule
  - Kyunki saas bhi kabhi bahu thi Rule

Leaves

- July 27-28
- Week of Aug 21-25

Make-up Classes (expected)

- Saturday, Aug 5 (10am-12pm)
- Saturday, Aug 12 (10am-12 pm)

Goal for this week

- Complete Java lab!
- Deadline of submission: 31st July midnight

Topics

Arrays

Lists

Abstract Data Types, object oriented concepts

Stacks, Queues

Trees : Binary trees, Balanced trees, B-trees

Strings : Tries, Matching algorithms

Sorting

Hashing

Graphs