



Summer School Algorithm


Week 1

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1. Introduction to Arrays, Stacks, Queues, Linked Lists
 2. Concept of Trees, Binary search trees, Binary heaps
 3. Tree and graph traversals, Connected components, Spanning trees, Shortest paths

Week 2

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1. Analysis, Asymptotic notation, Notions of space and time complexity, Worst and average case analysis; Design: Greedy approach
 2. Dynamic programming, Divide-and-conquer;

Week 3

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1. Hashing, Sorting, Searching. Asymptotic analysis (best, worst, average cases) of time and space, upper and lower bounds,
 2. Basic concepts of complexity classes – P, NP, NP-hard, NP-complete.

**Starts
from
3rd July**

Faculty Coordinator:
Mr. Chain Singh

For Registration please visit:
<https://goo.gl/PgaQcH>

Student Coordinators:
Nishant Kumar
Lokesh Pandey