DetaIls on class tests

Class Test 1 L1-L4

List of research projects to be undertaken by post graduate students

1. Deterministic polynomial time primality testing algorithm of Agrawal, Koyal, Saxena

You will find material in the net for AKS algorithm made easy. You need to prepare yourself for learning number theory a bit to understand the algorithm.

1. Ellipsoid Algorithm for solving LP problem

Again you will find material in the net to completely understand this algorithm for LP. Projective Algorithm for LP problem

Again you will find material in the net to completely understand this algorithm for LP

1. Fast Fourier Transform

Available in literature. You must completely understand. Is O(nlogn) lower bound?

1. Discovering properties of majority spanning trees and majority cotrees

Learn these structures from some of my papers and research on them www.angelfire.com/space2/m\_kaykobad

1. Solving systems of linear equations by projection

Discuss it with me to go deeper

1. Resolving complexity status of Huffman Coding with Unequal letter Cost

Search the word “unequal letter cost” to find papers around the topic.

1. Understanding minimum spanning tree algorithms

Search net and research

1. Understanding non-bipartite matching algorithms

Search net and research.

1. Understanding matrix multiplication algorithms

Search net and research

1. Counting vertices of a convex polytope

Search net and research.

1. On Hamiltonicity of a graph