

Indian Institute of Technology Kharagpur
Course:MA29005 Design and Analysis of Algorithms Lab
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Lab Assignment -03 (Aug 08, 2017)

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Problems

1. . Convert the following numbers into a max heap. Display the number of swaps

6 2 8 3 14 12 11 13 9 15

2. Make a min heap from the following numbers. Display the number of swaps

13 12 8 9 4 6 1 3

3. Write a program that has functions for inserting and deleting elements from a max heap. Besides, include a function to return the max element of the heap and another function to extract or remove the maximum element from the max heap.
4. Write a program to perform heap sort on a set of input numbers.
5. Write a program to check whether a given array is a binary heap or not.

All The Best!