

## **DS Lab (CSN 261)**

### **Assignment 3**

Q 1. WAP for median detection in an unsorted array.

Q2. There is an unsorted array of  $n$  elements. Three elements are picked randomly  $x, y, z$ ; such that  $x \leq y \leq z$ . Find the value of  $x, y, z$  such that  $|y-x|+|z-y|$  has maximum value for all possible combination of  $x, y, z$ .

Q3. WAP to reverse a linked list such that both its data, and the pointers are reversed.

Eg. Input: START  $\rightarrow$  1  $\rightarrow$  2  $\rightarrow$  3  $\rightarrow$  4

Output: 4  $\leftarrow$  3  $\leftarrow$  2  $\leftarrow$  1  $\leftarrow$  START

Link for submission : <https://www.dropbox.com/request/KBx9vMB154pbF9W6lvtN?oref=e>