SET1

Write any two programmes.

1.Given an array of size `n`, find the element that appears more than `n/2` times using Divide and Conquer
Input: `[2, 2, 1, 1, 1, 2, 2]`
Output: `2`

Hint: Combine results from left and right halves recursively.

2. Implement **Kruskal's Algorithm** for Minimum Spanning Tree

3. You are given a string expr that represents a valid arithmetic expression composed of:

• Single-digit positive integers (0-9)

• The binary operators: +, -, and *

Your task is to determine the minimum and maximum values that can be obtained by placing parentheses in different ways to change the order of operations.

You must consider all possible valid parenthesizations of the expression and return the minimum and maximum result obtainable from evaluating those different expressions.

Input: 1+2*3-4

Output

Min value= -3

Max value= 5