Lab01

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January 2020

1 Problem 1

Give sorted list (with length n), find if number (m) exist
Start with high = n - 1, low = 0

1. check if low is larger than high
   - if true, stop and RETURN FALSE
   - else, continue
2. check if that number at index [i = (high + low) // 2] equals target (m)
   - if not, check if that number is smaller than the target (m)
     - if true, set low = i + 1, and back to step 1
     - if false, set high = i - i, and back to step 1
   - else, stop and RETURN TRUE

2 Problem 2

an unsorted and immutable array of size n1 that contains all integers from 1 to n except one

1. calculate sum using sum rules (1 + n) * (n - 1) / 2
2. for each number in the array, deduct the number from the sum
3. return the number left