# My trick

* 1. learned use of dictionary – key count
     + duplicate character in String
     + Unique character in string
  2. Learned % and / operator use
     + Integer reverse
     + Add integer string
  3. Search - Binary Search on Array – Sorted Array
  4. Sort – Merge Sort >> A stable sorting algorithm
     + Overview of Merge sort
       - Divide and concur approach
       - Recursive
       - O(n) Space complexity
       - O(nlongn) time complexity
     + Implementation
       - Return if nArra <2
       - Find mid of nArra
       - Make left and right array and divide the main array into it
       - Recursive for left and right array **-2 recursive**
       - **Merge call - 3** 
         1. Three while loop need – I , j k =0;

First while will have if else two put right or left array in main array

Second while loop to put extra left array in main loop

Third while loop to put extra right array in main loop

* 1. Recursion
     + Help in Binary Tree , DP, Graph , backtracking and many topics root is Recursion
     + Permutation of string
     + Knight walk problem in backtracking

# String

## Find unique character

* Option 1
  + Via Decimal value based on bool array

# Practice

## String

### Find string has unique Character

### Reverse string

### String is palindrome

### Find First Unique Character in String – john

### Two word is given and you have to find if each word has same character count –

### // Permutations must be same length

### Swab

### Remove Duplicate character Except Vowels from string