

## 1 Check whether a given number 'n' is a Even number or Odd number.

Input: 'n' = 12

Output: true

Input: 'n' = 11

Output: false

## 2. Check whether a given number 'n' is a palindrome number.

Palindrome numbers are the numbers that don't change when reversed.

Return boolean value true or false.

Input: 'n' = 121

Output: true

Explanation: On reversing, 121 gives 121.

Input: 'n' = 51415

Output: true

Explanation: On reversing, 51415 gives 51415.

## 3. Find Unique element in Array

You have been given an integer array/list of size N. Where N is equal to  $[2M + 1]$ .

Now, in the given array/list, 'M' numbers are present twice and one number is present only once.

You need to find and return that number which is unique in the array/list.

Input: arr = [2,4,3,2,3]

Output: 4

## 4. Sort 0-1

You have been given an integer array/list (ARR) of size N that contains only integers, 0 and 1. Write a function to sort this array/list. Think of a solution which scans the array/list only once and don't require use of an extra array/list.

Note:

You need to change in the given array/list itself. Hence, no need to return or print anything.

Do not use in built sort() function

## 5. Given an array nums of size n, return *the majority element*.

The majority element is the element that appears more than  $\lfloor n / 2 \rfloor$  times. You may assume that the majority element always exists in the array.

Input: nums = [2,2,1,1,1,2,2]

Output: 2

## 6. Reverse String

Write a function that reverses a string

You must do this by modifying the input array **in-place** with  $O(1)$  extra memory. **AND do not use slicing and build in function.**

**Input:** s = "hello"

**Output:** "olleh"

## 7. Remove Consecutive Duplicates

For a given string(str), remove all the consecutive duplicate characters.

Example:

Input String: "aaaa"

Output: "a"

Input String: "aabbcc"

Output: "abc"