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1. Given a String with or without special characters find if it is Palindrome or Not.. No splitting of array must be done or No additional spaces must be used for storing the array..

Eg: RACE CAR

Eg: I DID, DID I ?

2. Given an array of integers of size **n**. Convert the array in such a way that if next valid number is same as current number, double its value and replace the next number with 0. After the modification, rearrange the array such that all 0's are shifted to the end.

Input : arr[] = {2, 2, 0, 4, 0, 8} Output : 4 4 8 0 0 0

Input : arr[] = {0, 2, 2, 2, 0, 6, 6, 0, 0, 8} Output : 4 2 12 8 0 0 0 0 0 0

3. A number is said to be twisted prime if it is a prime number and reverse of the number is also a prime number.

Input : 97 Output : Twisted Prime Number

Explanation: 97 is a prime number and its reverse 79 is also a prime number.

4. Given an array A[] and a number x, check for pair in A[] with sum as x.

Eg : Input {1, 2, 4, 3, 5, 6}

SUM : 5 Output : 2 (1, 4) & (2, 3)

5. Given an input string and a dictionary of words, find out if the input string can be segmented into a space-separated sequence of dictionary words. See following examples for more details.

Consider the following dictionary

{ i, like, sam, sung, samsung, mobile, ice, cream, icecream, man, go, mango }

Input: ilike Output: Yes - The string can be segmented as "i like".

Input: ilikesamsung

Output: Yes - The string can be segmented as "i like samsung" or "i like sam sung".

6. Print the following pattern

```
1
3 2
6 5 4
10 9 8 7
10 9 8 7
6 5 4
3 2
```

7. Given an odd length word which should be printed from the middle of the word.

The output should be in the following pattern.

Example:

Input : PROGRAM

Output :

```
          G
        GR
       GRA
      GRAM
     GRAMP
    GRAMPR
   GRAMPRO
```

8. Given an array of positive integers. The output should be the number of occurrences of each number.

Example:

Input: {2, 3, 2, 6, 1, 6, 2}

Output:

1 – 1

2 – 3

3 – 1

6 – 2

9. Given 2 huge numbers as separate digits, store them in array and process them and calculate the sum of 2 numbers and store the result in an array and print the sum.

Input: Number of digits:12

9 2 8 1 3 5 6 7 3 1 1 6

Number of digits:9

7 8 4 6 2 1 9 9 7

Output : 9 2 8 9 2 0 2 9 5 1 1 3

10. Given a string, change the order of words in the string (last string should come first).

Should use RECURSION

Sample: one two three

Output : three two one

