

NibilaAmutha

1. Write a program to convert a number into a mono-digit number.

Conditions:

- a) You are allowed to add and subtract the consecutive digits (starting from left).
- b) You are allowed to do only one operation on a digit.
- c) You cannot perform any operation on a resultant digit of the previous operation.
- d) Your code should also find if a given number cannot be converted to a mono digit number.

Input	Output
72581	7 (2+5) 81 77 (8-1) 777
3962	cannot create a mono digit number

2. Write a program to print all permutations of a given string. Note here you need to take all combinations as well, say for the input ABC the output should be as follows:

**Input :** ABC

**Output :**

A  
B C  
AB AC BA BC CA CB  
ABC ACB BCA BAC CBA CAB

3. You're given an array. Print the elements of the array which are greater than its previous elements in the array.

**Input :** 2, -3, -4, 5, 9, 7, 8    **Output:** 2 5 9 You should solve this question in O(n) time

You're given an even number n. If n=4, you have to print the following pattern :

4444  
4334  
4334  
4444

If n=6, then the pattern should be like this :

666666  
655556  
654456  
654456  
655556  
666666

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4. Spiral printing.

O/P

4444444

4333334

4322234

4321234

4322234

4333334

4444444

5. Print longest sequence between same character

Ex: I/p abcccccbba

O/p 8 (from a to a)

I/p aaaaaaaaa

O/p 6

6. It's about anagram.i/p was array of strings .and a word was given to find whether it has anagram in given array.

I/p catch, got, tiger, mat, eat, Pat, tap, tea

Word: ate

O/p eat, tea