DailyFlash

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Note: Your 5ᵗʰ Program will be in continuation to previous program to achieve a final output. Therefore, you have continue coding in yesterday's last code.

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Program 1: Write a Program that accepts an Array of N elements from user and checks if each element from that array is a palindrome number of not and prints only palindrome elements.

Input: Elements in Array: 5

Enter Elements in Array: 123 12321 11 23 1

Output: Palindrome Elements From array : 12321 11 1

Program 2: Write a Program that accepts a String from user, finds & prints any occurrence of two consecutive vowels in that string.

Input: heaven

Output: the entered string contains occurrences of two consecutive vowels as: ea

Program 3: Write a Program that accepts 2D Array of M Rows & N Columns from user and prints only diagonal elements from that array

Input: Enter Number of rows & cols : 3 3

Elements :   1   2   3

             3   4   5

             5   6   7

Output: Diagonal Elements from that array are : 1 4 7

Program 4: Write a Program to Print following Pattern.

Output:

```
                1
            0   1   0
        1   0   1   0   1
    0   1   0   1   0   1   0
```

Note: Program on Permutations & Combinations

Program 5: If a set n numbers is provides and you are, supposed to pick r items from that number then write a program to find the C(n, r) possible combinations of r items from a set on n numbers, if user provides both n and r. {Steps: to find combinations p(n, r) we have the formula,

C(n, r) = n!/r! * (n-r)!
        Where,
                P: is the number of permutations
                N: is the length of set
                R: is the number of items allowed to pick at a time.

}

Input:
    N = 10
    R = 2

Output: To pick 2 items from a set of 10 items there are 10 possible Combinations.