

DailyFlash

=====

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.

=====

Program 1: Write a Program that print Addition of Series up to nth length if user provides length.

Series: $1/(x+y)^1 * 1! + 1/(x+y)^2 * 2! + 1/(x+y)^3 * 3! + \dots + 1/(x+y)^n * n!$

(Where: x & y are the numbers entered by user)

Input: Enter Values of x & y = 2 4

Enter Length of Series: 3

Output: The Addition of entered Series: 0.173

Program 2: Write a Program that accepts a String from user then finds and prints the occurrence of vowels in that string

Input: heaven is just an illusion made by weak hearts

Output: The Vowels occurred for 16 times in that string

Program 3: Write a Program that accepts two Array of Length N from user and Computes multiplication of elements at same index from those array and stores that multiplication into third array at the same index, Print the third array.

Input: Length of Array: 6

Enter Elements in First Array: 1 4 3 2 5 6

Enter Elements in Second Array: 1 2 3 4 5 6

Output: After Operation the elements in third array : 1 6 9 8 25 36

Program 4: Write a Program to Print following Pattern.

Output:

```

        0
      4   9
    4  16  36
      36  81
        144
```

Program 5: Write a Program to calculate length of a Simple Pendulum (L) if user provides the Frequency (F) of that pendulum in Hz.

{Steps: To calculate Length of simple pendulum we can use formula

$$L = (4 * \pi^2 * F^2) / g$$

Where,

F: is the Frequency of pendulum in Hz

L: is length of pendulum in Meters.

g: is acceleration with the pendulum is oscillating(g = 9.81)

π : 3.142

}

Input: Frequency of Pendulum in Hz: 0.57

Output:

Length of that pendulum is 0.75 meters.