## **DailyFlash**

-----

Note: Your 5<sup>th</sup> 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:  $(x+y)^1/1! + (x+y)^2/2! + (x+y)^3/3! + ... + (x+y)^n/n!$ 

(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: 50.1

Program 2: Write a Program that accepts a String from user then finds and prints the word with minimum length from that string.

(Note: In the case of ambiguous behaviour, first minimum word is prioritized)

Input: heaven is just an illusion made by weak hearts

Output: The Word with minimum length from the entered string is: is

Program 3: Write a Program that accepts an Array on Length N from user and Sorts that array in descending order.

Input: Length of Array: 6

Enter Elements in Array: 1 4 3 2 5 6

Output: Array after operation: 6 5 4 3 2 1

Program 4: Write a Program to Print following Pattern.

## Output:

Program 5: Write a Program calculate acceleration of a Simple Pendulum (g) if user provides the Period (T) of that pendulum in seconds & Length (L) of that pendulum in meters.

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

$$g = (L*T2)/(4*\pi^4)$$
  
Where,

T: is the period of pendulum in seconds

L: is length of pendulum in Meters.

g: is acceleration with the pendulum is oscillating

 $\pi: 3.142$ 

}

Input:

Length of Pendulum in meters: 0.75 Period of Pendulum in Seconds: 1.73

Output:

Acceleration of that pendulum is 9.8281 m/s^2