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 prints whether two numbers entered by user are amicable numbers pair or not.

{Note: A Pair of two numbers can be Amicable if Sum of all perfect divisors of First number is equal to second number and vice versa.

e.g: 220 & 284 are amicable pair since, sum of all perfect divisors of 220 is 284 and for 284 its 220}

Input:

First Number: 1184

Second Number: 1210

Output:

The Given numbers are Amicable Pair

Program 2: Write a Program that replaces every occurrence of 1 with maximum digit from that number if user provides the number.

Input: 121145

Output: 525545

Program 3: Write a Program that computes & prints Duck Numbers entered by user using do while loop until user enters a negative number.

Input: 10 6 22 50 301 422 -1
Output: 10 50 301 Terminating

Program 4: Write a Program to Print following Pattern.

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            0
        2   3   4
    2   4   6   8   10
0   3   6   9   12  15  18
```

{Continue with Yesterday's Last Program}

Program 5: Write a Program that computes Area of a triangle if user enters the vertices of all three points of that triangle.

{Steps:

1. Calculate Area of Triangle using Heron's Formula i.e. Area A of triangle is :

   A = $\sqrt{p(p-a)(p-b)(p-c)}$

   Where,

   - a, b & c are the distances/lengths of each side of triangle.
   - P is semi-perimeter of Triangle

}

Input:

A (x1, y1) = 5 2
B (x2, y2) = 6 3
C (x3, y3) = 3 1

Output:

Length AB = 1.41
Length BC = 3.60
Length AC = 2.23
Perimeter of Triangle = 7.24
Semi-Perimeter of Triangle = 3.62

Area of Triangle = 0.4716