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Loops Practice Questions

Q1. Problem Statement

Implement a program to find out whether a number is divisible by the sum of its digits.

Display appropriate messages.

Sample Input and Output

Sample Input	Expected Output
2250	2250 is divisible by sum of its digits
123	123 is not divisible by sum of its digits

Q2. Implement a program to find out whether a number is a seed of another number.

A number X is said to be a seed of number Y if multiplying X by its every digit equates to Y.

E.g.: 123 is a seed of 738 as 123*1*2*3 = 738

Sample Input	Expected Output
123, 738	123 is a seed of 738
45, 1000	45 is not a seed of 1000

Q3. Problem Statement

Implement a program to check whether a given number is a lucky number.

A lucky number is a number whose sum of squares of every even-positioned digit (starting from the second position) is a multiple of 9.

E.g. - 1623 = 6^2+3^2 = 45 is a multiple of 9 and hence is a lucky number.

Sample Input and Output

Sample Input	Expected Output
1623	The number 1623 is a lucky number
15	The number is not a lucky number

Q4. Write a program to calculate the sum of following series where n is input by user.

1 + 1/2 + 1/3 + 1/4 + 1/5 +.....1/n

1x10 = 10, 2x10 = 20, 3x10 = 30, 4x10 = 40, 5x10 = 50, 6x10 = 60, 7x10 = 70, 8x10 = 80

Q6. Write a program to find the Armstrong number for a given range of number.

Input : 153

Expected Output :

Yes it is ArmStrong Number

Armstrong number is *a number that is equal to the sum of cubes of its digits*. For example 0, 1, 153, 370, 371 and 407 are the Armstrong numbers.

Q7. Write a program to calculate the factorial of a given number.

Input the number : 5
Expected Output :
The Factorial of 5 is: 120

Q8. Write a program to check whether a number is a palindrome or not.

Input a number: 121
Expected Output :
121 is a palindrome number.

Q9. Write a program to convert a decimal number into binary.

Input a decimal number: 10

Output : 1010

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Input a number: 4568

Output : Odd Place 4 + 6 = 10

Even Place 5 + 8 = 13

! **Enjoy the Questions Happy Coding** 😎