Programming Logic Development

1. Check Even or Odd

Definition: Determine if a number is even or odd.

Input: 7

Output: Odd

2. Find the Maximum of Two Numbers

Definition: Given two numbers, print the larger one.

Input: 5 9

Output: 9

3. Check Leap Year

Definition: Check if a given year is a leap year.

Input: 2020

Output: Leap Year

4. Sum of Natural Numbers

Definition: Calculate the sum of the first n natural numbers.

Input: 5

Output: 15

5. Factorial of a Number

Definition: Calculate factorial of a number.

Input: 4

Output: 24

6. Print Multiplication Table

Definition: Display multiplication table of a number up to 10.

Input: 3

Output: 3 x 1 = 3
...
3 x 10 = 30

7. Reverse a Number

Definition: Reverse the digits of a number.

Input: 1234

Output: 4321

8. Palindrome Check (Number)

Definition: Check if a number reads the same backward.

Input: 121

Output: Palindrome

9. Check Prime Number

Definition: Check whether the input number is prime.

Input: 11

Output: Prime

10. Count Digits in a Number

Definition: Count how many digits a number contains.

Input: 5023

Output: 4

11. Sum of Digits

Definition: Calculate the sum of all digits in a number.

Input: 123

Output: 6

12. Check Armstrong Number

Definition: Check if the number is equal to the sum of its digits each raised to the power of the number of digits.

Input: 153

Output: Armstrong

13. Generate Fibonacci Series

Definition: Generate the first n Fibonacci numbers.

Input: 5

Output: 0 1 1 2 3

14. Check Vowel or Consonant

Definition: Determine if a given character is a vowel.

Input: a

Output: Vowel

15. Simple Calculator

Definition: Perform +, -, *, / between two numbers.

Input: 4 + 2

Output: 6

16. Find GCD (HCF)

Definition: Calculate the greatest common divisor of two numbers.

Input: 20 28

Output: 4

17. Check Perfect Number

Definition: A number whose sum of divisors equals itself.

Input: 28

Output: Perfect

18. Print All Divisors

Definition: Display all positive divisors of a number.

Input: 10

Output: 1 2 5 10

19. Number is Positive, Negative or Zero

Definition: Check if number is +ve, -ve, or zero.

Input: -5

Output: Negative

20. Find Power (Exponentiation)

Definition: Compute a raised to the power b (a^b).

Input: 2 3

Output: 8