

## Problems

### 1. Sum of Two Numbers (3 points)

Given two integers, print their sum.

Example: Input: 3 5 → Output: 8

### 2. Odd or Even (3 points)

Check if a given number is odd or even.

Example: Input: 7 → Output: Odd

### 3. Find the Maximum of Two Numbers (3 points)

Given two numbers, find the larger one.

Example: Input: 10 15 → Output: 15

### 4. Simple Interest Calculation (3 points)

Given principal, rate, and time, calculate simple interest.

Formula:  $SI = (P \times R \times T) / 100$

### 5. Reverse a Number (5 points)

Reverse the digits of a given number.

Example: Input: 123 → Output: 321

### 6. Find the Factorial (5 points)

Given a number n, find n! (factorial of n).

Example: Input: 5 → Output: 120

### 7. Check Prime Number(5 points)

Given a number n, check if it is prime or not.

### 8. Print First N Natural Numbers (3 points)

Given n, print numbers from 1 to n.

**9. Count Digits in a Number (3 points)**

Given a number, count the total digits.

Example: Input: 7896 → Output: 4

**10. Swap Two Numbers Without Using a Third Variable (3 points)**

Example: Input: a = 5, b = 7 → Output: a = 7, b = 5

**11. Reverse a String ( 5 points)**

Given a string, print its reverse.

Example: Input: hello → Output: olleh

**12. Check Palindrome (Number) (5 points)**

Check if a number reads the same forward and backward.

Example: Input: 121 → Output: Yes

**13. Sum of Digits of a Number (5 points)**

Given an integer, find the sum of its digits.

Example: Input: 246 → Output: 12

**14. Find the Largest Element in an Array (5 points)**

Given an array, find the maximum value.

Example: Input: [3, 9, 1, 5] → Output: 9

**15. Print Multiplication Table of a Number ( 5 points)**

Given n, print its multiplication table up to 10.

**1. Check if a Given String is a Valid Parentheses Expression (10 points)**

**2. Find the Leader Elements in an Array (7 points)**

- A leader element is one that has no greater elements on its right.
- Example: Input: [16, 17, 4, 3, 5, 2] → Output: 17, 5, 2

**3. Find the First Non-Repeating Character in a String (10 points)**

**4. Merge Two Sorted Arrays (15 points)**

**5. Find Second Largest Element in an Array (10 points)**

**6. Count Vowels and Consonants in a String ( 10 points)**

**7. Fibonacci Series up to N Terms (10 points)**