# **Methods Practice Questions**

### 1. Sum of Two Numbers

Write a method **sum(int a, int b)** that takes two integers as input and returns their sum. Call this method in **main()** to display the result.

#### 2. Factorial of a Number

Write a method **int factorial(int n)** that calculates the factorial of a given number using recursion.

#### 3. Check Even or Odd

Write a method **boolean isEven(int n)** that returns true if a number is even and false if it's odd.

#### 4. Find Maximum of Three Numbers

Write a method **int max(int a, int b, int c)** that returns the largest number among the three given numbers.

#### 5. Reverse a Number

Write a method **int reverseNumber(int n)** that takes a number and returns its reverse. **Example:** 

Input: 1234 → Output: 4321

#### 6. Check if a Number is Prime

Write a method **boolean isPrime(int n)** that checks if a number is prime or not.

### 7. Print a Pattern using Methods

Write a method **void printStars(int n)** that prints a **right-angle triangle** of stars (\*). Example for n = 3

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\* \* \*

### 8. Sum of Digits

Write a method  $int sumOfDigits(int \ n)$  that calculates the sum of the digits of a number.

### **Example:**

Input: 1234 → Output: 10 (1+2+3+4)

# 9. Swap Two Numbers using a Method

Write a method **void swap(int a, int b)** that swaps two numbers and prints them.

# 10. Find GCD (Greatest Common Divisor) using a Method

Write a method **int gcd(int a, int b)** that calculates the GCD of two numbers using **Euclidean Algorithm**.