Recursion Homework-2

Do the following question and submit on google classroom.

(Only CPP files)

(example) Q1_22_1234.cpp

- 1. Write a recursive function to calculate the sum of numbers from 1 to n.
- 2. Implement a recursive function that prints the numbers from n down to 1.
- 3. Implement a recursive function to print all even numbers from 2 to a given positive integer n.
- 4. Write a recursive function to compute the factorial of a non-negative integer.
- **5.** Create a recursive function to calculate the result of raising a number x to a non-negative integer exponent n.
- 6. Write a recursive function to print all elements in an array.
- 7. Implement a simpler recursive function to compute the nth Fibonacci number.
- 8. Create a recursive function to check if a given string is a palindrome.
- 9. Implement a recursive function that converts a decimal number to its binary representation.
- 10. Write a recursive function to find the greatest common divisor (GCD) of two positive integers.
- 11. Implement a recursive function to print a pattern like a right-angled triangle using asterisks.
- 12. Create a recursive function to solve the Tower of Hanoi problem for n disks.