

Task(9.2)

Problem Statement:

Create a C++ program that implements a function to calculate the factorial of a given number using recursion.

In mathematics, the factorial of a non-negative integer n , denoted by $n!$, is the product of all positive integers less than or equal to n .

The factorial of n also equals the product of n with the next smaller factorial:
$$n! = n \times (n-1) \times (n-2) \times (n-3) \times \dots \times 3 \times 2 \times 1 = n \times (n-1)!$$

For example:

$5! = 5 \times 4! = 5 \times 4 \times 3 \times 2 \times 1 = 120$.

Thank You