RecursionOnlyFactorial:

Question:

Write a function factorial_recursive(n) that takes an integer n and returns the factorial of that number using recursion. The factorial of a number n is the product of all positive integers less than or equal to n. The factorial of 0 is defined as 1.

Constraints:

- The input n is an integer.
- You must use recursion to solve this problem.
- You may not use loops or any built-in functions that directly calculate factorial.
- The function should handle the base case when n is 0 or 1, returning 1.

Input Format:

• n: An integer representing the number for which the factorial is to be calculated.

Output Format:

• An integer representing the factorial of the given number n.

Sample Input:

5

Sample Output:

120

Explanation:

• For positive integers, the factorial is calculated recursively. For example, the factorial of 5 is 5 * 4 * 3 * 2 * 1 = 120.