



## DAILY PROGRAMMING CHALLENGE



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### LCM (Least Common Multiple) of Two Numbers

You are given two integers, N and M. Your task is to find the Least Common Multiple (LCM) of these two numbers. The LCM of two integers is the smallest positive integer that is divisible by both N and M.

#### Input:

- Two integers N and M, where  $1 \leq N, M \leq 10^9$

#### Output:

- A single integer representing the Least Common Multiple of N and M.

#### Examples:

- Example 1  
Input: N = 4, M = 6  
Output: 12  
Explanation: The smallest number divisible by both 4 and 6 is 12.

#### Constraints:

- $1 \leq N, M \leq 10^9$
- The integers N and M are positive and within the given range.

#### Test Cases:

- Input: N = 4, M = 6  
Output: 12
- Input: N = 5, M = 10  
Output: 10
- Input: N = 7, M = 3  
Output: 21
- Input: N = 1, M = 987654321  
Output: 987654321
- Input: N = 123456, M = 789012  
Output: 8117355456



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**Edge Cases:**

1. One number is 1: The LCM of any number with 1 is the number itself.
2. Both numbers are equal: If  $N == M$ , then LCM is N (or M).
3. Large numbers: Handle large inputs efficiently using the Euclidean algorithm for computing GCD.