

Lab Assignment
Week-6 Lab A

1. Given two numbers N and M. The task is to find the product of the 2 numbers using recursion.

Note: The numbers can be both positive or negative.

Examples:

Input : N = 5 , M = 3

Output : 15

Input : N = 5 , M = -3

Output : -15

Input : N = -5 , M = 3

Output : -15

Input : N = -5 , M = -3

Output:15

2. Given two integers **N** and **M**, the task is to find their [LCM](#) using [recursion](#).

Examples:

Input: N = 2, M = 4

Output: 4

Explanation: LCM of 2, 4 is 4.

Input: N = 3, M = 5

Output: 15

Explanation: LCM of 3, 5 is 15.

3. Given an integer n , the task is to find the sum of the series $1^1 + 2^2 + 3^3 + \dots + n^n$ using recursion.

Examples:

Input: $n = 2$

Output: 5

$$1^1 + 2^2 = 1 + 4 = 5$$

Input: $n = 3$

Output: 32

$$1^1 + 2^2 + 3^3 = 1 + 4 + 27 = 32$$