



NATIONAL UNIVERSITY OF COMPUTER & EMERGING SCIENCES
FAST - PESHAWAR CAMPUS

Data Structures Lab (CL-2001)

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Lab Task : Recursion

Question 1:

Write a function for multiply (a, b), where a and b are both positive integers, but you can only use the + or – operators.

Note: Use Recursion to solve the above problem.

Question 2:

Write a recursive function to generate the n-th Fibonacci number. The Fibonacci sequence is defined as $F(0) = 0$, $F(1) = 1$, and for $n \geq 2$, $F(n) = F(n-1) + F(n-2)$.

Example:

Input (n) : 6

Output: 8

Question 3:

Write a recursive function to find the sum of the digits of a given integer.

Example:

Input: 12345

Output: 15