

BRAC University
Department of Computer Science and Engineering
CSE 220: Data Structures

Task 1

Implement a recursive algorithm to find factorial of n .

Task 2

Implement a recursive algorithm to find the n -th Fibonacci number.

Task 3

Print all the elements of a given array recursively.

Task 4

Implement a recursive algorithm that takes a decimal number n and converts n to its corresponding (you may return as a string) binary number.

Task 5

Implement a recursive algorithm to find the m^n .

Task 6

Implement a recursive algorithm to add all the elements of a non-dummy headed singly linked linear list. Only head of the list will be given as parameter where you may assume every node can contain only integer as its element.

Note: you'll need a Singly Node class for this code.

Task 7

Implement a recursive algorithm which will print all the elements of a non-dummy headed singly linked linear list in reversed order.

Example: if the linked list contains 10, 20, 30 and 40, the method will print

40

30

20

10

Note: you'll need a Singly Node class for this code.