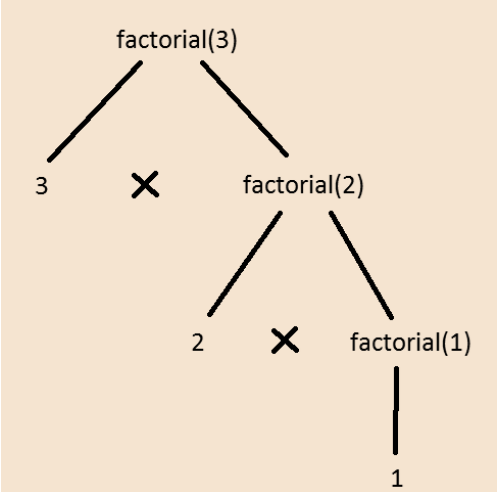
LAB 13

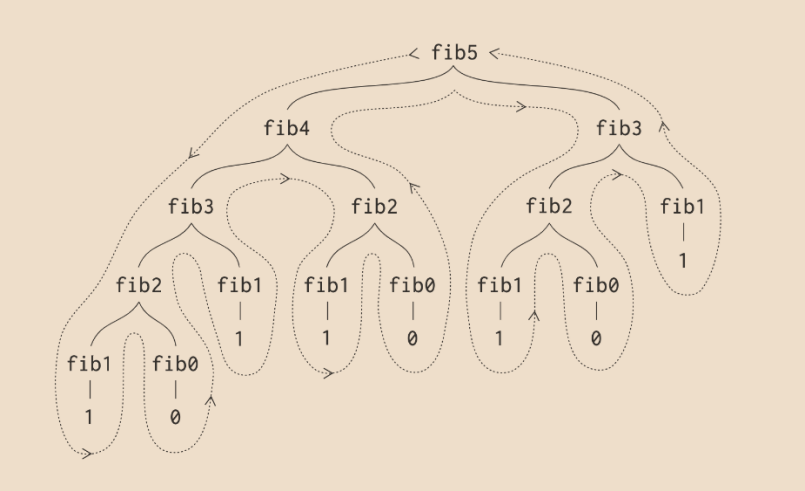
CSE225L

Recursion

In this lab, we will:

- Understand the concept of **recursion** and how it can be used to solve.
- Implement recursive functions for mathematical problems.





TASKS:

No.	Problem Description	Function Signature
1	Write a recursive function that returns the *n*th Fibonacci number in the series.	`int fib(int n);`
2	Write a recursive function to compute the factorial of a number.	`int factorial(int n);`
3	Write a recursive function that returns the sum of the digits of an integer.	`int sumOfDigits(int x);`
4	Write a recursive function that finds the minimum element in an array of integers.	`int findMin(int a[], int size);`
5	Write a recursive function that converts a decimal number to its binary equivalent.	`int DecToBin(int dec);`
6	Write a recursive function that returns the sum of the series: $1 + 1/2 + 1/4 + 1/8 + \ldots + 1/2^n$	`double sumSeries(int n);`