**CSE225L – Data Structures and Algorithms Lab**

**Lab 12**

**Recursion**

1. Write a recursive function that returns the nth Fibonacci number from the Fibonacci series.

int fib(int n);

1. Write a recursive function to find the factorial of a number.

int factorial(int n);

1. Write a recursive function that returns the sum of the digits of an integer.

int sumOfDigits(int x);

1. Write a recursive function that find the minimum element in an array of integers.

int findMin(int a[], int size);

1. Write a recursive function that converts a decimal number to binary number.

int DecToBin(int dec);

1. Write a recursive function that find the sum of the following series.

1 + 1/2 + 1/4 + 1/8 + ... + 1/2n