

NIT-J CSED
Computer Programming Lab
Lab 4: Recursion and Pointers

1. Write a program to calculate the factorial of a given number using recursion.
2. Write a C program to swap two numbers using pointers and functions. How to swap two numbers using call by value and call by reference method.
3. A 5-digit positive integer is entered through the keyboard, write a function to calculate sum of digits of the 5-digit number: (1) Without using recursion (2) Using recursion
4. A positive integer is entered through the keyboard, write a program to obtain the prime factors of the number. Modify the function suitably to obtain the prime factors recursively.
5. Write a recursive function to generate nth Fibonacci term in C programming. How to generate nth Fibonacci term in C programming using recursion.