

Algorithm Development and Programming Fundamentals

MCA SEM-1

Functions - II

1. Write a C program to calculate the power of an integer using recursion.
2. Run the following program using GCC compiler. Trace the function calls for the following input.

Input: **.UDD ot wmocleW**

```
#include <stdio.h>
void fun1();
int main() {
    printf("Enter a sentence: ");
    fun1();
    return 0;
}

void fun1() {
    char c;
    scanf("%c", &c);
    if (c != '\n') {
        fun1();
        printf("%c", c);
    }
}
```

3. Write a C program to find Factorial of a Number - N using Recursion.
4. Write a C program to find nth term in Fibonacci Series using Recursion.
5. Write a program in C to count the digits of a given number using recursion.
6. Write a program in C to find the sum of digits of a number using recursion.