CSA0317-DATA STRUCTURES

Program 5- Write a C program to find Factorial of a given number using Recursion

```c
#include <stdio.h>
long long factorial(int n) {
    if (n == 0 || n == 1)  // Base case
        return 1;
    else
        return n * factorial(n - 1);  // Recursive call
}
int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if (num < 0) {
        printf("Factorial is not defined for negative numbers.\n");
    } else {
        printf("Factorial of %d = %lld\n", num, factorial(num));
    }
    return 0;
}
```

Output:

main.c | **Output**

```
Enter a number: 3
Factorial of 3 = 6


=== Code Execution Successful ===
```