```c
#include <stdio.h>

int main() {
    int num;
    long long factorial = 1;

    // Input number
    printf("Enter a number: ");
    scanf("%d", &num);

    if (num < 0) {
        printf("Factorial is not defined for negative numbers.\n");
    } else {
        // Iterative calculation
        for (int i = 1; i <= num; i++) {
            factorial *= i;
        }
        printf("Factorial of %d is %lld\n", num, factorial);
    }

    return 0;
}
```

```
Enter a number: 5
Factorial of 5 is 120


=== Code Execution Successful =
```

```c
#include <stdio.h>

// Recursive function to calculate factorial
long long factorial(int n) {
    if (n == 0 || n == 1)
        return 1; // base case
    else
        return n * factorial(n - 1);
}

int main() {
    int num;

    // Input number
    printf("Enter a number: ");
    scanf("%d", &num);

    if (num < 0)
        printf("Factorial is not defined for negative numbers.\n");
    else
        printf("Factorial of %d is %lld\n", num, factorial(num));

    return 0;
}
```

```
Enter a number: 5
Factorial of 5 is 120
```