CSA0317-DATA STRUCTURES

Program 3- Write a c program to find factorial of a given number without using recursion

```c
#include <stdio.h>
int main() {
    int n, i;
    unsigned long long fact = 1;
    printf("Enter a number: ");
    scanf("%d", &n);
    if(n < 0) {
        printf("Factorial of negative number is not possible.\n");
    } else {
        for(i = 1; i <= n; i++) {
            fact *= i;   // fact = fact * i
        }
        printf("Factorial of %d = %llu\n", n, fact);
    }
    return 0;
}
```

Output:


```c
1  #include <stdio.h>
2
3  int main() {
4      int n, i;
5      unsigned long long fact = 1; // To store
           factorial
6
7      printf("Enter a number: ");
8      scanf("%d", &n);
9
10     if(n < 0) {
11         printf("Factorial of negative number is
               not possible.\n");
12     } else {
13         for(i = 1; i <= n; i++) {
14             fact *= i;   // fact = fact * i
15         }
16         printf("Factorial of %d = %llu\n", n,
               fact);
17     }
18
19     return 0;
20  }
```

Output:
```
Enter a number: 4
Factorial of 4 = 24

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