AIM

To write a C program to find the factorial of a given number without using recursion.

ALGORITHM

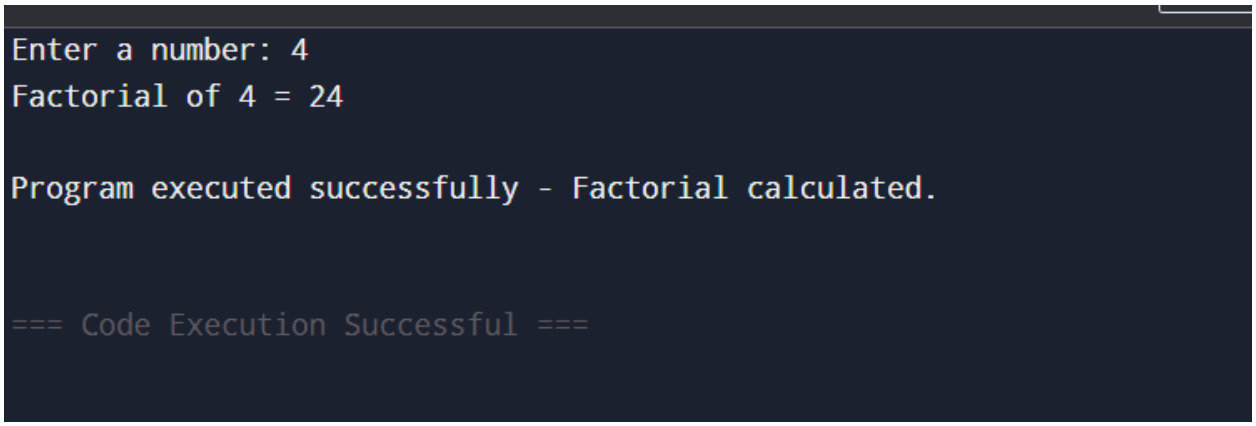
1. Start
2. Read an integer `n` from the user.
3. Initialize `fact = 1`.
4. Repeat a loop from `i = 1` to `n`:
    - Multiply `fact = fact * i`.
5. After the loop ends, `fact` contains the factorial of `n`.
6. Display the result.
7. End

CODE

```
#include <stdio.h>

int main() {
   int n, i;
   long long fact = 1;  // long long for large factorial values

   printf("Enter a number: ");
   scanf("%d", &n);

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

   printf("\nProgram executed successfully - Factorial calculated.\n");
   return 0;
```

}

INPUT AND OUTPUT:



RESULT:

The C program to find the factorial of a given number (without using recursion) was successfully executed and the expected output was obtained