```c
//Q29: Write a program to calculate the factorial of a number.

#include <stdio.h>

int main() {
    int n, i;
    long long fact = 1;  // use long long to store large results

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

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

    return 0;
}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Users\ACER\Desktop\c prog> gcc Day15.c
PS C:\Users\ACER\Desktop\c prog> ./a.exe
Enter a number: 8
40320
PS C:\Users\ACER\Desktop\c prog> 
```

```c
23
24     //Q30: Write a program to reverse a given number.
25
26     #include <stdio.h>
27
28     int main() {
29         int n, rev = 0, digit;
30
31         printf("Enter a number: ");
32         scanf("%d", &n);
33
34         while (n != 0) {
35             digit = n % 10;
36             rev = rev * 10 + digit;
37             n = n / 10;
38         }
39
40         printf("%d\n", rev);
41         return 0;
42     }
43
44
45
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Users\ACER\Desktop\c prog> gcc Day15.c
PS C:\Users\ACER\Desktop\c prog> ./a.exe
Enter a number: 9
9
PS C:\Users\ACER\Desktop\c prog>
```