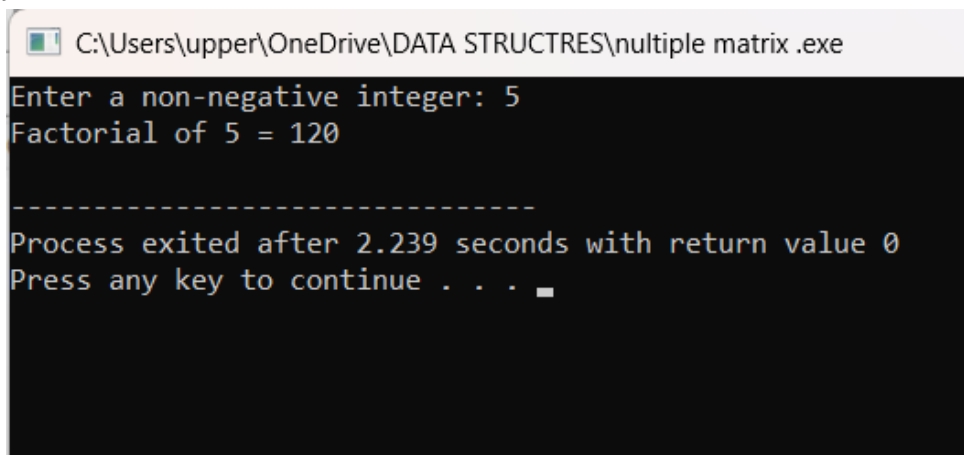```c
#include <stdio.h>
long factorial(int n) {
    if (n <= 1)
        return 1;
    else
        return n * factorial(n - 1);
}
int main() {
    int n;
    printf("Enter a non-negative integer: ");
    scanf("%d", &n);
    if (n < 0) {
        printf("Error! Factorial of a negative number doesn't exist.\n");
    } else {
        long result = factorial(n);
        printf("Factorial of %d = %ld\n", n, result);
    }
    return 0;
}
```

C:\Users\upper\OneDrive\DATA STRUCTRES\nultiple matrix .exe

```
Enter a non-negative integer: 5
Factorial of 5 = 120

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Process exited after 2.239 seconds with return value 0
Press any key to continue . . .
```