反复请求并计算阶乘直到用户终止

2022 年 8 月 16 日

1. 反复请求用户输入非负整数，当用户输入正整数时，输出相应的阶乘结果，当用户输入 0 时，结束程序。人机交互按如下参考结果中的方式进行。

   参考结果：

```
Enter a non-negative integer: (0 means ending this program)
5
The factorial of 5 is 120.
Enter a non-negative integer: (0 means ending this program)
6
The factorial of 6 is 720.
Enter a non-negative integer: (0 means ending this program)
8
The factorial of 8 is 40320.
Enter a non-negative integer: (0 means ending this program)
4
The factorial of 4 is 24.
Enter a non-negative integer: (0 means ending this program)
8
The factorial of 8 is 40320.
Enter a non-negative integer: (0 means ending this program)
0
THE END
```