

# 887. Super Egg Drop

## Description

You are given  $k$  identical eggs and you have access to a building with  $n$  floors labeled from 1 to  $n$ .

You know that there exists a floor  $f$  where  $0 \leq f \leq n$  such that any egg dropped at a floor **higher** than  $f$  will **break**, and any egg dropped **at or below** floor  $f$  will **not break**.

Each move, you may take an unbroken egg and drop it from any floor  $x$  (where  $1 \leq x \leq n$ ). If the egg breaks, you can no longer use it. However, if the egg does not break, you may **reuse** it in future moves.

Return *the minimum number of moves that you need to determine with certainty what the value of  $f$  is*.

### Example 1:

**Input:**  $k = 1, n = 2$

**Output:** 2

**Explanation:**

Drop the egg from floor 1. If it breaks, we know that  $f = 0$ .

Otherwise, drop the egg from floor 2. If it breaks, we know that  $f = 1$ .

If it does not break, then we know  $f = 2$ .

Hence, we need at minimum 2 moves to determine with certainty what the value of  $f$  is.

### Example 2:

**Input:**  $k = 2, n = 6$

**Output:** 3

### Example 3:

**Input:**  $k = 3, n = 14$

**Output:** 4

### Constraints:

- $1 \leq k \leq 100$
- $1 \leq n \leq 10^4$

