# 172. Factorial Trailing Zeroes

# Description

Given an integer n, return the number of trailing zeroes in n!.

Note that n! = n \* (n - 1) \* (n - 2) \* ... \* 3 \* 2 \* 1.

### Example 1:

```
Input: n = 3
Output: 0
Explanation: 3! = 6, no trailing zero.
```

#### Example 2:

```
Input: n = 5
Output: 1
Explanation: 5! = 120, one trailing zero.
```

#### **Example 3:**

```
Input: n = 0
Output: 0
```

## **Constraints:**

• 0 <= n <= 10 <sup>4</sup>

Follow up: Could you write a solution that works in logarithmic time complexity?