

## **342. Power of Four**

Given an integer  $n$ , return true if it is a power of four. Otherwise, return false.

An integer  $n$  is a power of four, if there exists an integer  $x$  such that  $n == 4^x$ .

### **Example 1:**

- **Input:**  $n = 16$
- **Output:** true

### **Example 2:**

- **Input:**  $n = 5$
- **Output:** false

### **Example 3:**

- **Input:**  $n = 1$
- **Output:** true

### **Constraints:**

- $-2^{31} \leq n \leq 2^{31} - 1$

**Follow up:** Could you solve it without loops/recursion?