

Power of Two

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

An integer n is a power of two, if there exists an integer x such that $n == 2^x$.

Example 1:

- **Input:** $n = 1$
- **Output:** true
- **Explanation:** $2^0 = 1$

Example 2:

- **Input:** $n = 16$
- **Output:** true
- **Explanation:** $2^4 = 16$

Example 3:

- **Input:** $n = 3$
- **Output:** false

Constraints:

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