**Power of 2**

Given a non-negative integer **N**. The task is to check if N is a power of **2**. More formally, check if**N**can be expressed as **2x**for some integer **x**. Return **true** if N is power of 2 else return **false**.

**Example 1:**

**Input:**N = 8

**Output:**YES

**Explanation:**8 is equal to 2 raised to 3 (23 = 8).

**Example 2:**

**Input:**N = 98

**Output:**NO

**Explanation:**98 cannot be obtained by any power of 2.

**Your Task:**Your task is to complete the function **isPowerofTwo**() which takes **n**as a parameter and returns true or false by checking if the given number can be represented as a power of two or not.

**Expected Time Complexity:**O(log N).  
**Expected Auxiliary Space:**O(1).

**Constraints:**  
0 ≤ N < LLONG\_MAX

class Solution{

public:

// Function to check if given number n is a power of two.

bool isPowerofTwo(long long n){

long long f=1;

if(n==1) return true;

if(n==0) return false;

for(int i=0;i<200;i++){

f=f\*2;

if(f==n){

break;

}

}

if(n==f) return true;

else return false;

}

};

Link : <https://www.geeksforgeeks.org/problems/power-of-2-1587115620/1?page=2&sortBy=submissions>