326 Power of Three

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Question:

Given an integer, write a function to determine if it is a power of three.
Follow up:
Could you do it without using any loop / recursion?

给出一个整数，写一个函数来确定这个数是不是3的一个幂。
后续挑战：
你能不使用循环或者递归完成本题吗？

Solution for Python3:

```python
class Solution1:
    def isPowerOfThree(self, n):
        """
        :type n: int
        :rtype: bool
        """
        if n > 1:
            while n % 3 == 0:
                n //= 3
        return n == 1

class Solution2:
    def isPowerOfThree(self, n):
        """
        :type n: int
        :rtype: bool
        """
        import sys
        import math
        return n > 0 and math.pow(3,33) % n == 0
```

Solution for C++:

```cpp
class Solution1 {
public:
    bool isPowerOfThree(int n) {
        if (n > 1) {
            while (n % 3 == 0) {
                n /= 3;
            }
        }
        return n==1;
    }
};

class Solution2 {
public:
    bool isPowerOfThree(int n) {
        return n > 0 && (int(pow(3,19)) % n) == 0;
    }
};
```