Problem #342 : Power of Four

<https://leetcode.com/problems/power-of-four/>

Simple Python 3 Solution using logarithm -- beats 96.97% in runtime and 88.60% in space complexity

Take the logarithm of the number to the base 4.

Take the floor and ceiling of the logarithm of the number to the base 4.

If floor and ceiling are equal, then it is an integer.

import math

class Solution:

def isPowerOfFour(self, num: int) -> bool:

if num <= 0:

return(False)

log\_result = math.log(num, 4)

return(math.floor(log\_result) == math.ceil(log\_result))

#return(log\_result.is\_integer()) This means the same as the above line.