Problem # 1523: Count Odd Numbers in an Interval Range

<https://leetcode.com/problems/count-odd-numbers-in-an-interval-range/>

Solution:

Simple Python 3 Solution -- Runtime beats 99.83%

<https://leetcode.com/problems/count-odd-numbers-in-an-interval-range/discuss/833902/Simple-Python-3-Solution-Runtime-beats-99.83>

1. If the low number is even, add 1 to it to make it the next number which will be odd
2. If the high number is even, subtract 1 from it to make it the next lower number which will be odd.
3. Get the difference between the high and low and divide the difference by 2. Add 1 to it to accommodate the last number.
4. For example, if low = 15 and high = 19, the difference is 4 and when divided by 2 will give 2  
   This 2 accounts for 15 and 17 only and not for the last number 19. So we have to add 1.

class Solution:

def countOdds(self, low: int, high: int) -> int:

if low % 2 == 0:

low += 1

if high % 2 == 0:

high -= 1

return(1 + (high - low)//2)