For each odd natural number m, $m = 2k + 1$, where k is an integer.
(by definition of odd numbers)
If k is odd, we get $k = 2n + 1$, where n is an integer.
So $m = 2k + 1 = 2(2n + 1) + 1 = 4n + 3$.
If k is even, we get $k = 2n$, where n is an integer.
So $m = 2k + 1 = 2(2n) + 1 = 4n + 1$.
Hence, it's proved true.