

Conjecture: Every odd natural number is of one of the forms $4n + 1$ or $4n + 3$, where $n \in \mathbb{Z}$.

By the division theorem, any number can be expressed in one of the forms $4q, 4q + 1, 4q + 2, 4q + 3$.

Of the four forms,

$4q$ and $4q + 2$ are divisible by 2, and are even.

$4q + 1$ and $4q + 3$ are not divisible by 2 and thus, are odd.

This shows that the conjecture is true.