JUGGLER SEQUENCE ALGORITHM

TIME COMPLEXITY ANALYSIS:

- The time complexity is determined by the **number of iterations** in the loop. The loop runs until the value becomes 1.
- In the **worst case**, the number of iterations required to reach 1 can be considered **logarithmic** with **base 2**.
- Therefore, the **time complexity** is often stated as **O(nlogn).**
- However, it's worth noting that it's conjectured that all Juggler sequences eventually reach 1, but this conjecture has not been **proven**. Therefore, we're effectively blocked from completing a Big O time complexity analysis.
- The **space complexity** of the Juggler sequence algorithm is **O(1)**, as it only requires a constant amount of space to store the current term in the sequence.