**Optimized Method for Recursion Solution**

**Problem with Recursion:**

In the current recursive implementation, each function call adds a new frame to the call stack.

This becomes inefficient—and even risky—for large values of n (years), as the stack keeps growing.

Eventually, it can lead to a **stack overflow error**, meaning the system runs out of space to keep track of all those calls.

**Better Approach: Iterative Solution**

We can replace recursion with a simple **for loop**, which doesn’t rely on the system stack.

This makes the code more **efficient and safer**, especially when forecasting for large time periods.

**Why it's better:**

**Time Complexity:** Still **O(n)** – we go through each year once.

**Space Complexity:** Reduced to **O(1)** – no extra memory used for call stacks.

It’s also easier to debug and understand for most developers.

**Program:**

