**Financial Forecasting**

**Understand Recursive Algorithms**

**Recursion**: Recursion is a method where the solution to a problem depends on solutions to smaller instances of the same problem. It simplifies problems by breaking them down into more manageable sub-problems. A recursive function calls itself with a subset of the original problem until it reaches a base case.

**Time Complexity**: The time complexity of a naive recursive algorithm can be high due to repeated calculations. For example, if each recursive call spawns two more calls, the time complexity can be exponential, O(2^n).  
 The calculateFutureValue method recursively calculates the future value by multiplying the initial value by the growth rate for each year.