Financial Forecasting

1. Understand Recursive Algorithms:

* Recursion is a technique where a function calls itself directly or indirectly to solve a problem. It simplifies certain problems by breaking them down into smaller, similar subproblems.

1. Setup:

* A method to calculate the future value using a recursive approach was created.

1. Implementation:

* A recursive algorithm to predict future values based on past growth rates was implemented.

1. Analysis:

* Time Complexity of the used recursive algorithm is O(n).
* To avoid excessive computation, memorization may be considered in order to reduce redundant calculations. Additionally, iterative approaches such as dynamic programming may be more efficient for large datasets.