Financial Forecasting

1. Recursion:

* Recursion is a technique where we try to divide the whole problem into sub-problems and in we try to solve the whole problem by working through these sub-problems in a nested manner
* We make use of recursive calls ( a function calling itself ) to go deep into the problem and we backtrack our way by solving the sub-problems

2. Time complexity:

* Time complexity of a recursive algorithm will always grow in an exponential order
* It is computed based on number of calls and the number of nested levels
* In my solution I have made only one recursive call and it will be called “year” number of times => O(1^n) = O(n)

3. Optimization:

* To optimize recursion we can use “memoization” where we store the results of all previously computed recursion calls
* If we have to re compute that call then we can directly access the previous result and avoid recomputation