**Exercise – 2 Implementing the Financial Forecasting using Recursion Function (Theory)**

**1.explain the concept of recursion and explain how it can simplify certain problems**

Answer:

Recursion Function: Recursion is the scenario where the function calls itself to solve problems.

This can simplify problems like breaking them into smaller scenarios which will lead to backtrack the problem in certain cases.

**2.Explain the time complexity of your recursive algorithm.**

**Explantion:**

The complexity of the programme can be justified as follows.

The programme calcuate the sum of the last three years data inorder to predict the future values.This uses lastSum() function to calculate last three values.This uses direct indexing of the last three values which would take the complexity of O(1).

Now the recursion Function comes into action which call the lastSum() function for n years that is N times the number of years we want to predict the values.So this gives the Time complexity of O(n).