**Exercise 7: Financial Forecasting**

**Program:**

public class Main {

    public static void main(String[] args) {

        double presentValue = 15000;

        double []pastRates = {0.05,0.04,0.09,0.06,0.03,0.02,0.01};

        System.out.println("Future value after 7 years: "+findValue(presentValue , pastRates , 0));

    }

    public static double findValue(double presentValue , double [] pastRates , int i){

        if(i==pastRates.length){

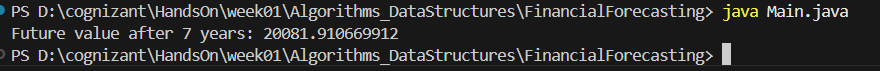
            return presentValue;

        }

        return findValue(presentValue\*(1+pastRates[i]), pastRates, i+1);

    }

}



Recursion is a programming technique where a function calls itself to solve a problem. Each recursive call solves a smaller sub-problem, and the solution builds up when the base case is reached.

Key parts of recursive function :

Base Case

Recursive Case