**FinancialForecast.java**  
  
package week1.financial\_forecasting;

public class FinancialForecast {

    public static double calculateFutureValue(double currentValue, double growthRate, int years) {

        if (years == 0) {

            return currentValue;

        }

        return calculateFutureValue(currentValue, growthRate, years - 1) \* (1 + growthRate);

    }

    public static void main(String[] args) {

        double initialInvestment = 10000; // Starting value

        double annualGrowthRate = 0.10;   // 10% annual growth

        int forecastYears = 5;            // Forecast for 5 years

        double futureValue = calculateFutureValue(initialInvestment, annualGrowthRate, forecastYears);

        System.out.printf("Future value after %d years: ₹%.2f%n", forecastYears, futureValue);

    }

}