**Financial Forecast**

**FinancialForecast.java**

public class FinancialForecast {

    // Recursive function to calculate future value

    public static double forecastValue(double principal, double rate, int years) {

        if (years == 0) {

            return principal; // Base case

        }

        return forecastValue(principal, rate, years - 1) \* (1 + rate); // Recursive case

    }

    public static void main(String[] args) {

        double initialAmount = 10000; // ₹10,000

        double growthRate = 0.08; // 8% interest per year

        int forecastYears = 5; // Forecast for 5 years

        double futureValue = forecastValue(initialAmount, growthRate, forecastYears);

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

    }

}

