**Exercise 7: Financial Forecasting**

**FinancialForecast.java**

public class FinancialForecast {

    public static double futureValue(double initialValue, double rate, int years) {

        if (years == 0) {

            return initialValue;

        }

        return futureValue(initialValue, rate, years - 1) \* (1 + rate);

    }

    public static void main(String[] args) {

        double initial = 1000.0;

        double rate = 0.10;

        int years = 5;

        double resultRecursive = futureValue(initial, rate, years);

        System.out.printf("Recursive Forecast after %d years: Rs. %.2f%n", years, resultRecursive);

    }

}

**Output**

