( Main.java )

import java.util.Scanner;

public class Main {

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

if (years == 0) return pv;

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

}

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter Present Value: ");

double pv = sc.nextDouble();

System.out.print("Enter Growth Rate (e.g., 0.1 for 10%): ");

double rate = sc.nextDouble();

System.out.print("Enter Number of Years: ");

int years = sc.nextInt();

double result = futureValue(pv, rate, years);

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

sc.close();

}

}

