**Exercise 7: Financial Forecasting**

using System;

public class Financial\_Forecast

{

public static double calculateFutureValue(int year, double initialvalue, double growthrate)

{

if (year == 0)

{

return initialvalue;

}

return calculateFutureValue(year - 1, initialvalue, growthrate) \* (1 + growthrate);

}

public static void Main(string[] args)

{

Console.Write("Enter initial value (₹): ");

double initialValue = double.Parse(Console.ReadLine());

Console.Write("Enter annual growth rate (in %): ");

double growthRatePercent = double.Parse(Console.ReadLine());

double growthRate = growthRatePercent / 100.0;

Console.Write("Enter target number of years: ");

int targetYear = int.Parse(Console.ReadLine());

double futureValue = calculateFutureValue(targetYear, initialValue, growthRate);

Console.WriteLine($"Future Value after {targetYear} years: {futureValue:F2}");

}

}

