Program.cs

using System;

class Program

{

    static void Main(string[] args)

    {

        double initialValue = 1000.0;

        double annualGrowthRate = 0.10;

        int years = 5;

        double result = CalculateFutureValueRecursive(initialValue, annualGrowthRate, years);

        Console.WriteLine($"Future value after {years} years is: ₹{result:F2}");

    }

    static double CalculateFutureValueRecursive(double value, double rate, int years)

    {

        if (years == 0)

        {

            return value;

        }

        double nextValue = value \* (1 + rate);

        return CalculateFutureValueRecursive(nextValue, rate, years - 1);

    }

}

Output :

