**Exercise 4 . Financial Forecasting**

using System;

public class FinancialForecast

{

    public double MonthlyIncome;

    public double MonthlyExpenses;

    public double InterestRate;

    public int Months;

    public double CalculateSavings()

    {

        double savings = 0;

        double monthlyRate = InterestRate / 12 / 100;

        for (int i = 1; i <= Months; i++)

        {

            savings += (MonthlyIncome - MonthlyExpenses);

            savings += savings \* monthlyRate;

        }

        return savings;

    }

    public void ShowForecast()

    {

        double finalSavings = CalculateSavings();

        Console.WriteLine($"\n Forecasted Savings after {Months} months: ₹{finalSavings:F2}");

    }

}

public class Program

{

    public static void Main()

    {

        FinancialForecast forecast = new FinancialForecast();

        Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\*\* Financial Forecast Calculator \*\*\*\*\*\*\*\*\*\*\*\n");

        Console.Write("Enter Monthly Income in Rupees: ");

        forecast.MonthlyIncome = Convert.ToDouble(Console.ReadLine());

        Console.Write("Enter Monthly Expenses in Rupees: ");

        forecast.MonthlyExpenses = Convert.ToDouble(Console.ReadLine());

        Console.Write("Enter Interest in Percentage: ");

        forecast.InterestRate = Convert.ToDouble(Console.ReadLine());

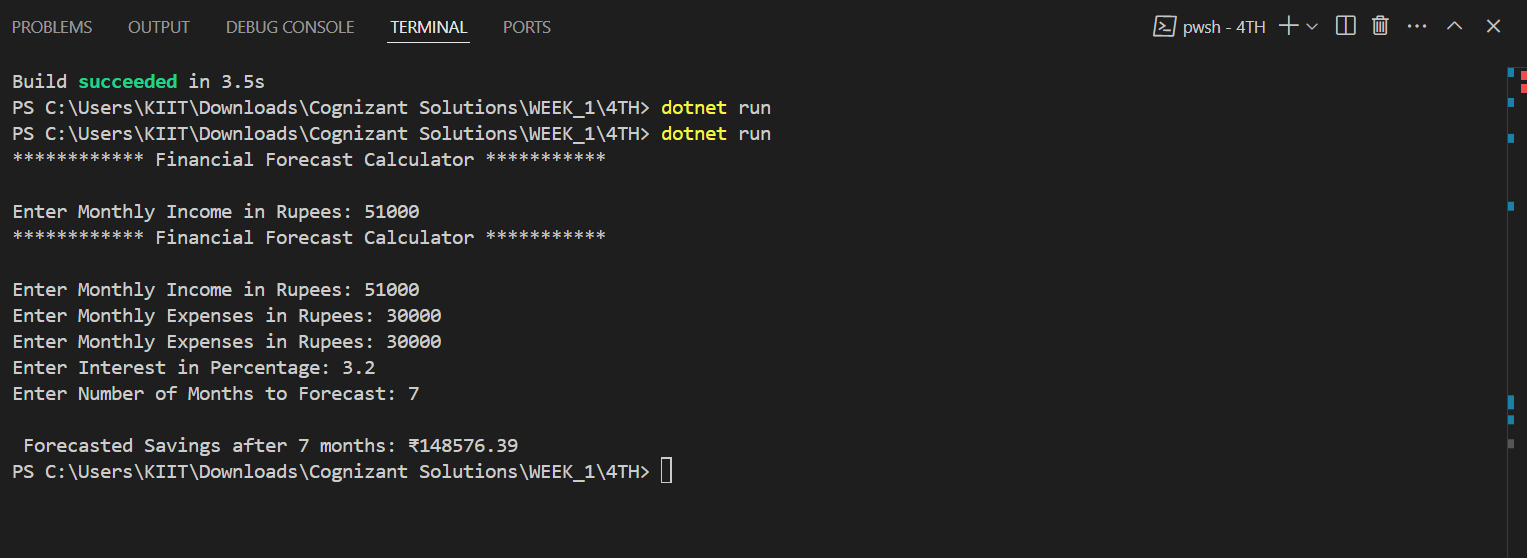
        Console.Write("Enter Number of Months to Forecast: ");

        forecast.Months = Convert.ToInt32(Console.ReadLine());

        forecast.ShowForecast();

    }

}

****