using System;

namespace CompoundInterest

{

class Program

{

static void Main(string[] args)

{

// declare variables

double ci, amount, p, r;

int n, t;

// take input of initial principal amount,

// interest rate, periodicity of payment and year

Console.Write("Enter the principal balance = ");

p = Convert.ToDouble(Console.ReadLine());

Console.Write("Enter interest rate= ");

r = Convert.ToDouble(Console.ReadLine());

Console.Write("Enter compound frequency / year = ");

n = Convert.ToInt32(Console.ReadLine());

Console.Write("Enter the year = ");

t = Convert.ToInt32(Console.ReadLine());

// calculate compounded value

// using formula

amount = p \* Math.Pow((1 + r/(100 \* n)), n\*t);

//find the compound interest

ci = amount - p;

// display result upto 2 decimal places

Console.WriteLine("Compound interest = "+Math.Round(ci, 2));

// wait for user to press any key

Console.ReadKey();

}

}

}