For: Michael Kroth

Assignment: Unit One Exam

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| **Screenshot(s)** |
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| **Code** |
| using System;  using static System.Console;  namespace UnitOneExam  {  /// <summary>  /// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  /// Title: Unit One Exam  /// Name: Michael Kroth  /// Date: 02/16/19  /// Purpose: This program will calculate the number of bunnies  /// using the fibonacci sequence.  /// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  /// </summary>  class UnitOneExam  {  static void Main(string[] args)  {  // Variable Declaration  int gen;    // Welcome message  WriteLine("Welcome to the Bunny fold size estimator");  // Start of loop  do  {  // fibonacci variables  int fold1 = 0;  int fold2 = 1;  int newFold = 0;  int sum = 0;  // Ask users for input  WriteLine("How many generations would you like to estimate? (-1 to quit): ");  if (!int.TryParse(ReadLine(), out gen)) // Validates input. Sets gen to zero if invalid  {  WriteLine("Invalid input. Generations set to 0.");  WriteLine("The fold size estimate is {0} after {1} generations", sum, gen);  WriteLine("..."); // New Line  }  else if (gen != 0 && gen != -1) // If input is valid, Calculates the total of bunnies.  {  for (int i = 0; i < gen; i++) // beginning of for loop  {  newFold = fold1 + fold2;  fold2 = fold1;  fold1 = newFold; // fibonacci sequence  sum += newFold;  } // end of for loop  WriteLine("\nThe fold size estimate is {0} after {1} generations", (sum + 1), gen); // Outputs the answer  WriteLine("..."); // New Line  }  }while(gen != -1); // end of while loop  } // end of main method  } // end of class  } // end of namespace |