For: TJ Liggett

Assignment: Leap Year

|  |
| --- |
| **Screenshot(s)** |
|  |
|  |

|  |
| --- |
| **Code** |
| using System;  using static System.Console;  /\*  Name: TJ Liggett  Project:Leap Year  Date: 3/22/2017  \*/  namespace Leap\_Year  {  class Program  {  static void Main(string[] args)  {  string enteredYear = ""; //must be declared for while loop  Write("Please enter a year (-1 to quit): \n");  enteredYear = ReadLine(); //ends while loop if -1 is entered  while (enteredYear != "-1")  {  int year = GetYear(enteredYear);  int modFour = GetModFour(year);  int modHundred = GetModHundred(year);  int modFourHundred = GetModFourHundred(year);  CalculateResults(year, modFour, modHundred, modFourHundred);  Write("Please enter a year (-1 to quit): \n");  enteredYear = ReadLine(); //ends while loop if -1 is entered  }  }  //gets user input for the year  public static int GetYear(string enteredYear)  {  int year;  while (int.TryParse(enteredYear, out year) == false)  {  Write("Invalid input. Please enter a year (-1 to quit): \n");  enteredYear = ReadLine();  }  //year = Convert.ToInt32(enteredYear);  return year;  }  //calculates modulus 4 for leap year  static int GetModFour(int year)  {  int modFour;  modFour = year % 4;  return modFour;  }  //calculates modulus 100 for leap year  static int GetModHundred(int year)  {  int modHundred;  modHundred = year % 100;  return modHundred;  }  //calculates modulus 400 for leap year  static int GetModFourHundred(int year)  {  int modFourHundred;  modFourHundred = year % 400;  return modFourHundred;  }  //calculates end results  static void CalculateResults(int year, int modFour, int modHundred, int modFourHundred)  {  #region modulo if statements  WriteLine("Year entered: {0}", year);  //for modulo 4  Write("Divisible by 4: ");  if (modFour == 0)  {  WriteLine("Yes");  }  else  {  WriteLine("No");  }  //for modulo 100  Write("Divisible by 100: ");  if (modHundred == 0)  {  WriteLine("Yes");  }  else  {  WriteLine("No");  }  //for modulo 400  Write("Divisible by 400: ");  if (modFourHundred == 0)  {  WriteLine("Yes");  }  else  {  WriteLine("No");  }  #endregion  Write("Leap year: ");  if (modFour == 0 && modHundred != 0)  {  WriteLine("Yes");  }  else if (modHundred == 0 && modFourHundred == 0)  {  WriteLine("Yes");  }  else  {  WriteLine("No");  }  }  }  } |
|  |