|  |
| --- |
| using System; |
|  |  |
|  | namespace Triangle |
|  | { |
|  | class Program |
|  | { |
|  | static void Main(string[] args) |
|  | { |
|  | Console.WriteLine("This application uses Herron's formula to find the area of a triangle."); |
|  | double a = GetInput("a"); |
|  | double b = GetInput("b"); |
|  | double c = GetInput("c"); |
|  | double p = (a + b + c) / 2; |
|  | double area = Math.Sqrt(p \* (p - a) \* (p - b) \* (p - c)); |
|  | if (area >= 0.000000001) |
|  | Console.WriteLine($"The area of the triangle is: {area:#.####}"); |
|  | else |
|  | Console.WriteLine("The lengths given are impossible for a triangle."); |
|  | } |
|  | private static double GetInput(string s) |
|  | { |
|  | double value; |
|  | do |
|  | { |
|  | Console.Write($"Enter a the length of side {s}: "); |
|  | try |
|  | { |
|  | value = double.Parse(Console.ReadLine()); |
|  | } |
|  | catch (Exception) |
|  | { |
|  | Console.WriteLine("Please use only numbers."); |
|  | value = -1; |
|  | } |
|  | } while (value <= 0); |
|  | return value; |
|  | } |
|  | } |