You are given a chain of digits. The first element of the chain is the initial *offset*. Your task is to calculate the total *offset*, where*offset* is the sum of differences between two consecutive digits.

**Example**

For chain = "14839", the output should be  
offsets(chain) = 6.

The total *offset* is calculated as follows:  
1 + ((8 - 4) + (3 - 8) + (9 - 3)) = 1 + (4 - 5 + 6) = 6.

**Input/Output**

* **[time limit] 3000ms (cs)**
* **[input] string chain**

A string of digits.

*Constraints:*  
5 ≤ chain.length ≤ 1000.

* **[output] integer**

The total *offset*.

<https://codefights.com/challenge/HTPdz8fy2hiZGAXbJ/main>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int offsets(string chain)

{

int sum = 0;

sum += int.Parse(chain[0].ToString());

for (int i = 1; i +1< chain.Length; i++)

{

sum += int.Parse(chain[i + 1].ToString()) - int.Parse(chain[i].ToString());

}

return sum;

}

static void Main(string[] args)

{

Console.WriteLine(offsets("14839"));

Console.ReadLine();

}

}

}