Your task is to implement the following algorithm for the given n:

1. let x equal the product of digits in n;
2. n = x;
3. if n >= 10, goto 1;
4. return n.

**Example**

For n = "1234", the output should be  
MultipleNumber(n) = 8.

1 \* 2 \* 3 \* 4 = 24, and 2 \* 4 = 8, thus the answer is 8.

**Input/Output**

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

A number given as a string.

*Constraints:*  
0 ≤ n ≤ 1015.

* **[output] integer**

The result the above-described algorithm will produce.

<https://codefights.com/challenge/sfW9pdqpfDCiasbX6/main>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int MultipleNumber(string n)

{

while (long.Parse( n) >= 10)

{

int x = 1;

for (int i = 0; i < n.Length; i++)

{

x \*= int.Parse(n[i].ToString());

}

n = x.ToString();

}

return int.Parse(n);

}

static void Main(string[] args)

{

Console.WriteLine(MultipleNumber("11111111111111"));

Console.ReadLine();

}

}

}