A *masked number* is a string that consists of digits and one asterisk (\*) that should be replaced by exactly one digit. Given a *masked number* find all the possible options to replace the asterisk with a digit to produce an integer divisible by 3.

**Example**

For inputString = "1\*0", the output should be  
isDivisibleBy3(inputString) = ["120", "150", "180"].

**Input/Output**

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

A *masked number*.

*Guaranteed constraints:*  
1 ≤ inputString.length ≤ 105.

* **[output] array.string**

Sorted array of strings representing all non-negative integers that correspond to the given mask and are divisible by 3.

**[C#] Syntax Tips**

// Prints help message to the console

// Returns a string

string helloWorld(string name) {

Console.Write("This prints to the console when you Run Tests");

return "Hello, " + name;

}

<https://codefights.com/challenge/WpnhtifjPLiNNC98o/solutions>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static string[] isDivisibleBy3(string inputString)

{

List<string> res = new List<string>();

for (int i = 0; i <= 9; i++)

{

string elem = inputString;

elem = elem.Replace('\*', char.Parse(i.ToString()));

if (elem.Sum(e => e - '0') % 3 == 0)

{

res.Add(elem);

}

}

return res.ToArray();

}

static void Main(string[] args)

{

string inputString = "1\*0";

foreach (string elem in isDivisibleBy3(inputString))

{

Console.WriteLine(elem);

}

Console.ReadLine();

}

}

}