We define the *middle* of the array arr as follows:

* if arr contains an odd number of elements, its*middle* is the element whose index number is the same when counting from the beginning of the array and from its end;
* if arr contains an even number of elements, its*middle* is the sum of the two elements whose index numbers when counting from the beginning and from the end of the array differ by one.

Given array arr, your task is to find its *middle*, and, if it consists of two elements, replace those elements with the value of *middle*. Return the resulting array as the answer.

**Example**

* For arr = [7, 2, 2, 5, 10, 7], the output should be  
  replaceMiddle(arr) = [7, 2, 7, 10, 7].

The *middle* consists of two elements, 2 and 5. These two elements should be replaced with their sum, i.e. 7.

* For arr = [-5, -5, 10], the output should be  
  replaceMiddle(arr) = [-5, -5, 10].

The *middle* is defined as a single element -5, so the initial array with no changes should be returned.

**Input/Output**

* **[time limit] 3000ms (cs)**
* **[input] array.integer arr**

The given array.

*Constraints:*  
2 ≤ arr.length ≤ 104,  
-103 ≤ arr[i] ≤ 103.

* **[output] array.integer**

arr with its *middle* replaced by a single element, or the initial array if the *middle* consisted of a single element to begin with.

<https://codefights.com/arcade/code-arcade/list-forest-edge/APD5T5CybxTtfkdjL>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int[] replaceMiddle(int[] arr)

{

List<int> ans = new List<int>();

if (arr.Length % 2 == 0)

{

for (int i = 0; i < arr.Length / 2 -1; i++)

{

ans.Add(arr[i]);

}

ans.Add((arr[arr.Length / 2 - 1] + arr[arr.Length / 2]));

for (int i = arr.Length / 2 + 1; i < arr.Length; i++)

{

ans.Add(arr[i]);

}

return ans.ToArray();

}

return arr ;

}

static void Main(string[] args)

{

//int[] arr = {7, 2, 2, 5, 10, 7};

int[] arr = { -5, -5, 10 };

int[] res = replaceMiddle(arr);

foreach (int elem in res)

{

Console.Write(elem + " ");

}

Console.ReadLine();

}

}

}