In this challenge, you'll be finding the nth smallest multiple of any integer element in a given array, a.

This challenge is inspired by my original interpretation of a [previous challenge](https://codefights.com/challenge/GrnTbWrj62B6AJXag).

**Example**  
For a = [3, 5, 7] and n = 7, the output should be findNthSmallestMultiple(a, n) = 12.  
The list of multiples is:  
[3, 5, 6, 7, 9, 10, 12, 14, 15 ... ]  
and the 7th multiple is 12.

**Input/Output**

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

*Guaranteed constraints:*  
3 ≤ a.length < 10,  
1 ≤ a[i] < 150.

* **[input] integer n**

*Guaranteed constraints:*  
3 ≤ n < 25.

* **[output] integer**

**[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/fZc29yBzrmWcaiFAu/solutions>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int findNthSmallestMultiple(int[] a, int n)

{

HashSet<int> hs = new HashSet<int>();

for (int i = 1; i <= 10; i++)

{

for (int j = 0; j < a.Length; j++)

{

hs.Add(a[j] \* i);

}

}

List<int> lis = hs.ToList();

lis.Sort();

return lis[n-1];

}

static void Main(string[] args)

{

//int[] a = { 3, 5, 7 }; //12

//int n = 7;

int[] a = { 4, 10, 2 }; //8

int n = 4;

Console.WriteLine(findNthSmallestMultiple(a, n));

Console.ReadLine();

}

}

}