

Our Solution(s)	Run Code	Your Solutions	Run Code
<div>Solution 1</div> <pre>1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved. 2 3 import java.util.Arrays; 4 5 class Program { 6 // O(nlog(n) + mlog(m)) time O(1) space 7 public static int[] smallestDifference(int[] arrayOne, int[] arrayTwo) { 8 Arrays.sort(arrayOne); 9 Arrays.sort(arrayTwo); 10 int idxOne = 0; 11 int idxTwo = 0; 12 int smallest = Integer.MAX_VALUE; 13 int current = Integer.MAX_VALUE; 14 int[] smallestPair = new int[2]; 15 while (idxOne < arrayOne.length && idxTwo < arrayTwo.length) { 16 int firstNum = arrayOne[idxOne]; 17 int secondNum = arrayTwo[idxTwo]; 18 if (firstNum < secondNum) { 19 current = secondNum - firstNum; 20 idxOne++; 21 } else if (secondNum < firstNum) { 22 current = firstNum - secondNum; 23 idxTwo++; 24 } else { 25 return new int[] {firstNum, secondNum}; 26 } 27 if (smallest > current) { 28 smallest = current; 29 smallestPair = new int[] {firstNum, secondNum}; 30 } 31 } 32 return smallestPair; 33 } }</pre>		<div>Solution 1 Solution 2 Solution 3</div> <pre>1 class Program { 2 public static int[] smallestDifference(int[] arrayOne, int[] arrayTwo) { 3 // Write your code here. 4 return null; 5 } 6 } 7</pre>	
<div>Our Tests</div>		<div>Custom Output Submit Code</div>	

```
1 class Program {
2
3     static void Main()
4     {
5         Console.WriteLine("Enter a number:");
6         int number = int.Parse(Console.ReadLine());
7         Console.WriteLine("The square of {0} is {1}", number, number * number);
8     }
9 }
10
11 class Program {
12
13     static void Main()
14     {
15         Console.WriteLine("Enter a number:");
16         int number = int.Parse(Console.ReadLine());
17         Console.WriteLine("The square of {0} is {1}", number, number * number);
18     }
19 }
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21 class Program {
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24     {
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26         int number = int.Parse(Console.ReadLine());
27         Console.WriteLine("The square of {0} is {1}", number, number * number);
28     }
29 }
```

Run or submit code when you're ready.