

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 package main
4
5 import (
6     "math"
7     "sort"
8 )
9
10 // O(nlog(n) + mlog(m)) time | O(1) space
11 func SmallestDifference(array1, array2 []int) []int {
12     sort.Ints(array1)
13     sort.Ints(array2)
14     idxOne, idxTwo := 0, 0
15     smallest, current := math.MaxInt32, math.MaxInt32
16     smallestPair := []int{}
17     for idxOne < len(array1) && idxTwo < len(array2) {
18         first, second := array1[idxOne], array2[idxTwo]
19         if first < second {
20             current = second - first
21             idxOne += 1
22         } else if second < first {
23             current = first - second
24             idxTwo += 1
25         } else {
26             return []int{first, second}
27         }
28         if smallest > current {
29             smallest = current
30             smallestPair = []int{first, second}
31         }
32     }
33     return smallestPair
34 }
35
```

Solution 1   Solution 2   Solution 3

```
1 package main
2
3 func SmallestDifference(array1, array2 []int) []int {
4     // Write your code here.
5     return nil
6 }
7
```

Custom Output   Raw Output   Submit Code

**Run or submit code when you're ready.**