

Our Solution(s)	Run Code	Your Solutions	Run Code
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Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(nlog(n) + mlog(m)) time | O(1) space
4 function smallestDifference(arrayOne, arrayTwo) {
5   arrayOne.sort((a, b) => a - b);
6   arrayTwo.sort((a, b) => a - b);
7   let idxOne = 0;
8   let idxTwo = 0;
9   let smallest = Infinity;
10  let current = Infinity;
11  let smallestPair = [];
12  while (idxOne < arrayOne.length && idxTwo < arrayTwo.length) {
13    let firstNum = arrayOne[idxOne];
14    let secondNum = arrayTwo[idxTwo];
15    if (firstNum < secondNum) {
16      current = secondNum - firstNum;
17      idxOne++;
18    } else if (secondNum < firstNum) {
19      current = firstNum - secondNum;
20      idxTwo++;
21    } else {
22      return [firstNum, secondNum];
23    }
24    if (smallest > current) {
25      smallest = current;
26      smallestPair = [firstNum, secondNum];
27    }
28  }
29  return smallestPair;
30 }
31
32 exports.smallestDifference = smallestDifference;
33
```

Solution 1Solution 2Solution 3

```
1 function smallestDifference(arrayOne, arrayTwo) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.smallestDifference = smallestDifference;
7
```

Run or submit code when you're ready.