

56. Two Sum

Difficulty Easy Accepted Rate 28%

Given an array of integers, find two numbers such that they add up to a specific target number.

The function `twoSum` should return *indices* of the two numbers such that they add up to the target, where `index1` must be less than `index2`. Please note that your returned answers (both `index1` and `index2`) are zero-based.

Notice

You may assume that each input would have exactly one solution

Example

numbers= `[2, 7, 11, 15]`, target= `9`

return `[0, 1]`

```
1 public class Solution {
2     public int[] twoSum(int[] numbers, int target) {
3         // write your code here
4         int res[] = new int[2];
5         HashMap<Integer, Integer> map = new HashMap<Integer, Integer>();
6         for( int i = 0; i < numbers.length; i++ ){
7             int cur = numbers[i];
8             int toFind = target - cur;
9             if( map.containsKey(cur) ){
10                 res[0] = map.get(cur);
11                 res[1] = i;
12             } else{
13                 map.put(toFind, i); //注意, 将差值放入
14             }
15         }
16         return res;
17     }
18 }
```