138. 子数组之和

给定一个整数数组，找到和为零的子数组。你的代码应该返回满足要求的子数组的起始位置和结束位置

```java
/*Thougths:
Record the sum from (0 ~ a).
Check sum on each index i, when found an existing sum in the hashMap, we are done.
Reason:
If adding all the numbers together, for example if sum[0 ~ a] = -3, ... sum[0 - b] = -3 again, a<b
That means from a ~ b, there is not change: that is, sum[a - b] = 0.
As result, hashmap.get(a)+1 will be the satrting index, and b will be ending index.
*/
public List<Integer> subarraySum(int[] nums) {
    ArrayList<Integer> rst = new ArrayList<Integer>();
    if( null == nums || nums.length == 0 )
        return rst;
    int sum = 0;
    HashMap<Integer, Integer> map = new HashMap<Integer, Integer>();
    map.put(0,-1); // 防止sum==0的情况
    for( int i = 0; i < nums.length; i++ ){
        sum += nums[i];
        if( map.containsKey( sum ) ){
            rst.add( map.get(sum) + 1 );
            rst.add(i);
            return rst;
        }
        map.put(sum,i);
    }
    return rst;
}
```