44. Minimum Subarray

* [Description](http://www.lintcode.com/en/problem/minimum-subarray/" \l "description)
* [Notes](http://www.lintcode.com/en/problem/minimum-subarray/#note)
* [Testcase](http://www.lintcode.com/en/problem/minimum-subarray/#testcase)
* [Judge](http://www.lintcode.com/en/problem/minimum-subarray/#judge)

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Given an array of integers, find the subarray with smallest sum.

Return the sum of the subarray.

 Notice

The subarray should contain one integer at least.

Have you met this question in a real interview?

Yes

**Example**

For [1, -1, -2, 1], return -3.

<http://www.lintcode.com/en/problem/minimum-subarray/#>

**public** **class** Solution {

*/\**

*\* @param nums: a list of integers*

*\* @return: A integer indicate the sum of minimum subarray*

*\*/*

**public** **int** minSubArray(List<Integer> nums) {

*// write your code here*

**int** min\_sum = nums.get(0);

**int** sum = nums.get(0);

**for**(**int** i =1; i<nums.size(); i++) {

              sum = Math.min(nums.get(i), sum + nums.get(i));

              min\_sum = Math.min(min\_sum, sum);

         }

**return** min\_sum;

    }

}