

```
1 // 有一个升序排列的数组，寻找数组中元素绝对值最小的数
2
3 package array;
4
5 class FindMinAbsoluteValueNumber {
6
7     public static Integer findMinAbsoluteValueNumber(int[] nums) {
8
9         if (nums == null || nums.length == 0) {
10             return null;
11         }
12
13         int startIndex = 0, endIndex = nums.length - 1;
14
15         while (true) {
16
17             int middleIndex = startIndex + (endIndex - startIndex) / 2;
18             if (nums[middleIndex] == 0) {
19                 return 0;
20             } else if (nums[middleIndex] < 0) {
21                 if (middleIndex == endIndex || middleIndex + 1 == endIndex) {
22                     int temp1 = Math.abs(middleIndex);
23                     int temp2 = Math.abs(endIndex);
24                     return temp1 < temp2 ? nums[middleIndex] : nums[endIndex];
25                 } else {
26                     startIndex = middleIndex;
27                 }
28             } else if (nums[middleIndex] > 0) {
29                 if (middleIndex == startIndex || middleIndex - 1 == endIndex) {
30                     int temp1 = Math.abs(middleIndex);
31                     int temp2 = Math.abs(startIndex);
32                     return temp1 < temp2 ? nums[middleIndex] : nums[startIndex];
33                 } else {
34                     endIndex = middleIndex;
35                 }
36             }
37         }
38     }
39
40     public static void main(String[] args) {
41
42         int[] nums = {-10, -5, -2, 7, 15, 50};
43         System.out.println(findMinAbsoluteValueNumber(nums));
44     }
45 }
```