

```

1  /*Author: Bochen (mddboc@foxmail.com)
2  Last Modified: Tue Apr 10 22:28:45 CST 2018*/
3
4  /*Given a non-negative integer represented as a non-empty array of digits, plus one
   to the integer.
5
6  ..... You may assume the integer do not contain any leading zero, except the
   number 0 itself.
7
8  ..... The digits are stored such that the most significant digit is at the head of
   the list.*/
9
10 import java.util.Arrays;
11 import java.lang.Math;
12 import java.lang.System;
13 import java.util.HashMap;
14 import java.lang.Integer;
15 import java.util.Iterator;
16 import java.util.Map;
17
18
19 public class Main {
20
21     .... public static void main(String[] args) {
22         ..... int[] nums = {2, 2};
23
24         ..... Solution solution = new Solution();
25         ..... int receive = solution.findShortestSubArray(nums);
26
27
28         ..... System.out.println("haha");
29     }
30
31 }
32
33
34 class Solution {
35     .... public int[] plusOne(int[] digits) {
36
37         ..... int digitsLength = digits.length;
38         ..... if (digits == null || digitsLength < 1) {
39             ..... return digits;
40         }
41
42         ..... int additionBit = 0;
43         ..... int currentSum = digits[digitsLength - 1] + 1;
44         ..... if (currentSum == 10) {
45             ..... additionBit = 1;
46             ..... digits[digitsLength - 1] = 0;
47         } else {
48             ..... digits[digitsLength - 1] = currentSum;
49         }
50
51         ..... for (int i = digitsLength - 2; i >= 0; i--) {
52             ..... currentSum = digits[i] + additionBit;
53             ..... if (currentSum == 10) {
54                 ..... additionBit = 1;
55                 ..... digits[i] = 0;
56             } else {
57                 ..... additionBit = 0;
58                 ..... digits[i] = currentSum;
59             }
60         }
61
62         ..... if (additionBit == 0) {
63             ..... return digits;
64         } else {
65             ..... return plusOneHelper(digits);
66         }
67     }
68
69     .... private int[] plusOneHelper(int[] digits) {
70

```

```
71     .....int digitsLength = digits.length;
72
73     .....int[] returnValue = new int[digitsLength+1];
74
75     .....returnValue[0] = 1;
76     .....for (int i = 1; i <= digitsLength; i++) {
77     .....    returnValue[i] = digits[i-1];
78     .....}
79
80     .....return returnValue;
81     ....}
82 }
```