

## 860. Lemonade Change

Easy

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At a lemonade stand, each lemonade costs  $\$5$ . Customers are standing in a queue to buy from you and order one at a time (in the order specified by `bills`). Each customer will only buy one lemonade and pay with either a  $\$5$ ,  $\$10$ , or  $\$20$  bill. You must provide the correct change to each customer so that the net transaction is that the customer pays  $\$5$ .

Note that you do not have any change in hand at first.

Given an integer array `bills` where `bills[i]` is the bill the  $i^{\text{th}}$  customer pays, return `true` if you can provide every customer with the correct change, or `false` otherwise.

### Example 1:

**Input:** `bills = [5,5,5,10,20]`

**Output:** `true`

**Explanation:**

From the first 3 customers, we collect three  $\$5$  bills in order.

From the fourth customer, we collect a  $\$10$  bill and give back a  $\$5$ .

From the fifth customer, we give a  $\$10$  bill and a  $\$5$  bill.

Since all customers got correct change, we output `true`.

### Example 2:

**Input:** `bills = [5,5,10,10,20]`

**Output:** `false`

**Explanation:**

From the first two customers in order, we collect two  $\$5$  bills.

For the next two customers in order, we collect a  $\$10$  bill and give back a  $\$5$  bill.

For the last customer, we can not give the change of  $\$15$  back because we only have two  $\$10$  bills.

Since not every customer received the correct change, the answer is `false`.

### Constraints:

- $1 \leq \text{bills.length} \leq 10^5$
- `bills[i]` is either  $5$ ,  $10$ , or  $20$ .

```
1  class Solution {
2      public boolean lemonadeChange(int[] bills) {
3
4          int size = bills.length;
5          int numberOfFiveDollars = 0;
6          int numberOfTenDollars = 0;
7          int numberOfTwentyDollars = 0;
8
9          for(int i = 0 ; i < size; i++){
10             if(bills[i] == 5)
11                 numberOfFiveDollars++;
12             else if(bills[i] == 10){
13                 //Change of 10 is only payable via five
14                 dollar
15                 if(numberOfFiveDollars > 0){
16                     numberOfFiveDollars--;
17                     numberOfTenDollars++;
18                 }
19                 else
20                     return false;
21             }else{
22                 //Change of 20 is payable via 5 and 10
23                 dollars
24                 if(numberOfTenDollars > 0 &&
25                 numberOfFiveDollars > 0){
26                     numberOfTenDollars--;
27                     numberOfFiveDollars--;
28                 }else if(numberOfFiveDollars >= 3){
29                     numberOfFiveDollars =
30                     numberOfFiveDollars - 3;
31                 }
32                 else
33                     return false;
34             }
35         }
36     }
```