ข้อ 5

Lemonade Stand

Published by **BijogFc24** in **JavaScript**

conditions | logic | loops | math | numbers

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.

Return `true` if and only if you can provide every customer with correct change.

Examples

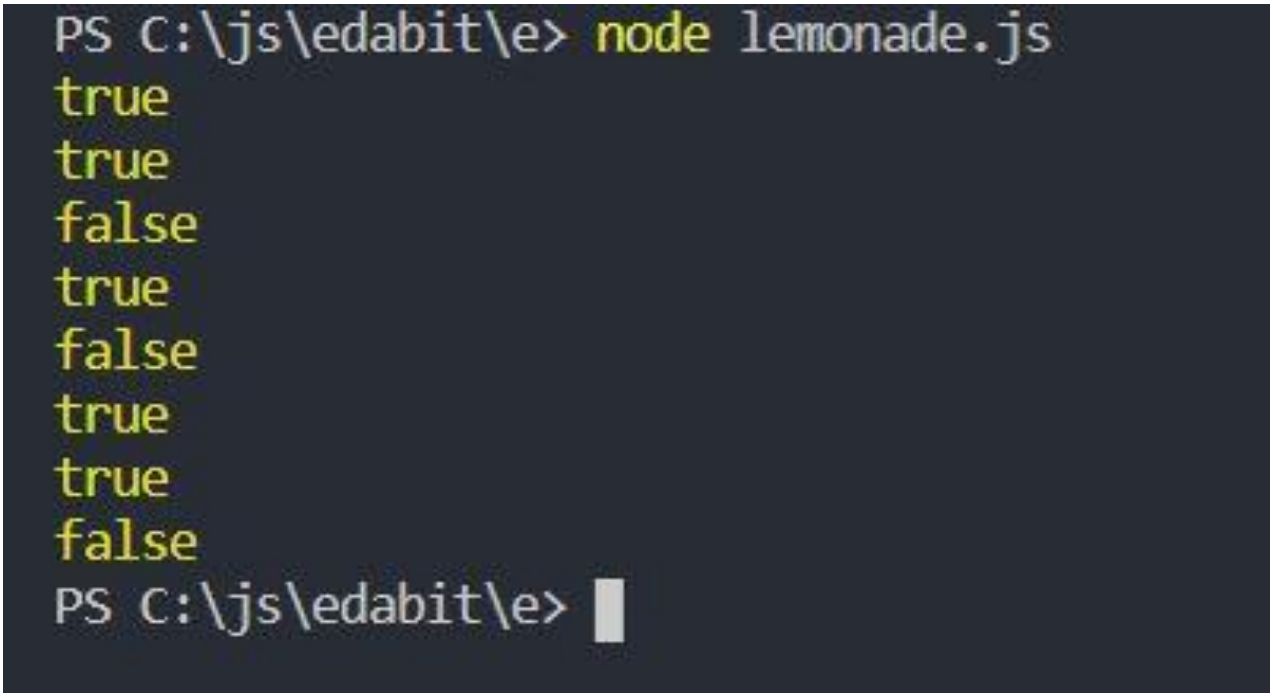
> lemonade([5, 5, 5, 10, 20]) → true
>
> lemonade([5, 5, 10, 10, 20]) → false
>
> lemonade([10, 10]) → false
>
> lemonade([5, 5, 10]) → true

Code

JS lemonade.js > ...

```
const lemonade = (arr) => {
  const cost = 5;
  let bank = 0;
  let payment = 0;
  let change = 0;

  for (let i = 0; i < arr.length; i++) {
    payment = arr[i];
    change = payment - cost;

    if (change > bank) {
      return false;
    }

    bank += cost;
    bank -= change;
  }

  return true;
};

// Tests
console.log(lemonade([5, 5, 5, 10, 20]));
console.log(lemonade([5, 5, 10]));
console.log(lemonade([10, 10]));
console.log(lemonade([5, 5, 5, 20]));
console.log(lemonade([5, 5, 10, 10, 20]));
console.log(lemonade([5, 5, 5, 5, 10, 5, 10, 10, 10, 20]));
console.log(lemonade([5, 10, 5, 5, 5, 20, 5, 10, 5, 5, 10, 20]));
console.log(lemonade([5, 10, 5, 5, 5, 20, 5, 10, 20, 5, 10, 20, 10]));
```

Run


PS C:\js\edabit\e> node lemonade.js
true
true
false
true
false
true
true
false
PS C:\js\edabit\e>