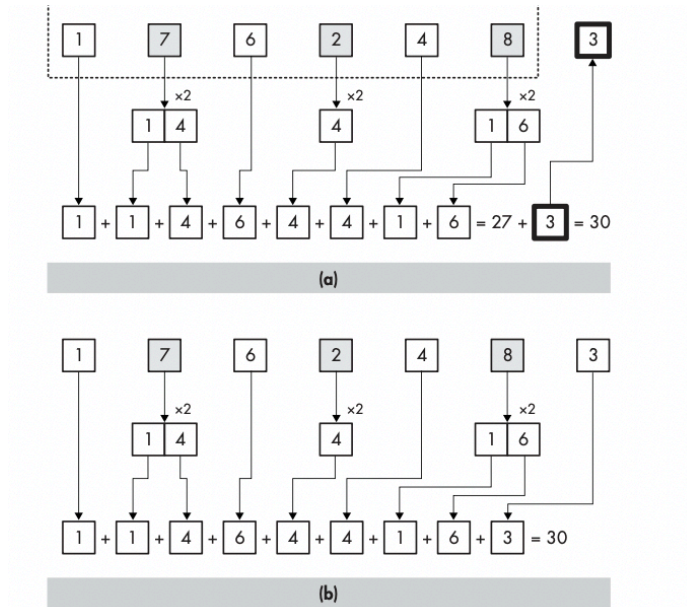


PROBLEM: LUHN CHECKSUM VALIDATION, FIXED LENGTH - done in javascript not C++

Write a program that takes an identification number (including its check digit) of length six and determines whether the number is valid under the Luhn formula. The program must process each character before reading the next one.



Breaking down problem:

- A. We have to read and process each digit one at a time (left to right). We can't store the numbers.
- A. We would need a variable to store the processed output from each digit that would sum to the previous output - this would allow us to discard the previous inputs.
- B. We'd need to index the numbers to know which is even or odd. We'd
- B. Every other number is doubled
 - A. We'd need to make a counter variable that is incremented at the end of each id digit. At the beginning of the beginning of the digit processing, we'd need to check to see if it was an even or odd number. If even, the digit would need to be doubled. If odd, it would just be added on.
- C. If the number doubled is two digits, they are added inline to checksum

- A. We could either define action for numbers 10-18 and if that was true, we'd split the two digits using slice or a similar built in function. Or, we could convert every number to string and if length is 2, slice, convert back to number and add them individually.
- D. The check digit is included in this example.
 - A. We know the length of this ID without check digit is 5.

Pseudocode for each part broken down: