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Intuition

1. We start from the rightmost digit of the given list because we are essentially adding 1 to the number represented by the list.
2. If the rightmost digit is 9, adding 1 would result in a carry. So, we set the current digit to 0 and move to the next digit on the left.
3. If the current digit is not 9, adding 1 does not result in a carry, so we can safely update the current digit and return the updated list.
4. If all digits are 9, adding 1 would result in a carry throughout the number. In this case, after the loop, we add 1 at the beginning of the list to handle the carry.

Approach

1. Start iterating the given list of digits from the rightmost digit.
2. Check if the current digit is 9:
    - If yes, set the current digit to 0 and continue to the next digit on the left.
    - If no, add 1 to the current digit and return the updated list immediately.
3. If the loop completes without returning (this means all digits were 9), add 1 at the beginning of the list to handle the carry.

Complexity

- Time complexity: O(n)
- Space complexity: O(1)

Code

```
class Solution:
    def plusOne(self, digits: List[int]) -> List[int]:
        for i in range(len(digits)-1, -1, -1):
            if digits[i] == 9:
                digits[i] = 0
            else:
                digits[i] = digits[i] + 1
                return digits
        return [1] + digits
```