Max Consecutive Ones

Given a binary array, find the maximum number of consecutive 1s in this array.

Example 1:

Input: [1,1,0,1,1,1]

Output: 3

Explanation: The first two digits or the last three digits are consecutive 1s.

The maximum number of consecutive 1s is 3.

Note:

- The input array will only contain 0 and 1.
- The length of input array is a positive integer and will not exceed 10,000

Solution 1

```
class Solution(object):
    def findMaxConsecutiveOnes(self, nums):
        cnt = 0
        ans = 0
        for num in nums:
            if num == 1:
                cnt += 1
                ans = max(ans, cnt)
        else:
                cnt = 0
        return ans
```

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```
public int findMaxConsecutiveOnes(int[] nums) {
   int maxHere = 0, max = 0;
   for (int n : nums)
       max = Math.max(max, maxHere = n == 0 ? 0 : maxHere + 1);
   return max;
}
```

The idea is to reset maxHere to 0 if we see 0, otherwise increase maxHere by 1
The max of all maxHere is the solution

```
110111
^ maxHere = 1

110111
.^ maxHere = 2

110111
..^ maxHere = 0

110111
...^ maxHere = 1

110111
....^ maxHere = 2

110111
....^ maxHere = 3
```

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Solution 3

```
int findMaxConsecutiveOnes(int* nums, int numsSize) {
   int i, count, max;

max = count = 0;
   for (i = 0 ; i < numsSize ; ++i)
        if (nums[i])
        if (++count > max) max = count;
        else count = 0;

return max;
}
```

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From Leetcoder.