Question: https://leetcode.com/problems/running-sum-of-1d-array/

So what we see is we need to return an array where res[i]=sumation of num elements from 0 to i, so if we initialize

res[0] as nums[0]

And then for i=1 to nums.length-1

res[i]=res[i-1]+nums[i]

While this is not a terribly challenging problem, it's a good introduction to the concept of a ****prefix sum array****. Prefix sum arrays have many uses in more complex algorithms and can sometimes help reduce the time complexity of a advanced solution by an order of magnitude.

So what is Prefix Sum Array?

-> In a prefix sum array, we will create a duplicate array which contains the running sum of the elements ****0**** to ****i**** of our original array (****nums****) for each index ****i**** of our prefix sum array (****ans****).

Solution:  
class Solution {

public int[] runningSum(int[] nums) {

for(int i=1; i<nums.length; i++){

nums[i]+=nums[i-1];

}

return nums;

}

}

Github Link :<https://lnkd.in/ecwtJeaz>