Running Sum in C++

```
#include <iostream>
#include <vector>
using namespace std;
vector<int> runningSum(vector<int>& nums) {
  int n = nums.size();
  vector<int> pre(n);
  pre[0] = nums[0];
  for (int i = 1; i < n; i++) {
    pre[i] = pre[i - 1] + nums[i];
  return pre;
int main() {
  vector<int> arr = \{1, 2, 3, 4\};
  vector<int> res = runningSum(arr);
  for (int i = 0; i < res.size(); i++) {
    cout << res[i] << endl;</pre>
  }
  return 0;
```

Input:

vector<int> arr = $\{1, 2, 3, 4\}$;

Dry Run Table:

i	nums[i]	pre[i - 1]	pre[i] = pre[i - 1] + nums[i]	pre vector after iteration
0	1	-		[1, _, _, _]
1	2	1	pre[1] = 1 + 2 = 3	[1, 3, _, _]
2	3		pre[2] = 3 + 3 = 6	
3	4	6	pre[3] = 6 + 4 = 10	[1, 3, 6, 10]

∀ Final Output (printed one per line):