**Assignment 1**

**PROGRAM to understand Arrays in C++:**

class Solution {

public:

vector<int> twoSum(vector<int>& nums, int target) {

unordered\_map<int, int> hash; // stores element-index pairs

vector<int> result;

for (int i = 0; i < nums.size(); i++) {

int complement = target - nums[i];

if (hash.count(complement)) { // complement found

result.push\_back(hash[complement]);

result.push\_back(i);

break;

}

hash[nums[i]] = i;

}

return result;

}

};