Perfect Sum Problem

```
#include <bits/stdc++.h>

using namespace std;

// dp[i][j] 表示前i个元素和是否等于j
int countSubsets(vector<int>& arr, int n, int sum) {
    vector<vector<int>> dp(n + 1, vector<int>(sum + 1));
    for (int i = 0; i <= n; ++i)
        dp[i][0] = 1;
    for (int i = 1; i <= sum; ++i)
        dp[0][i] = 0;
    for (int i = 1; i <= n; ++i) {
        for (int j = 1; j <= sum; ++j) {
            if (arr[i - 1] > j)
                dp[i][j] = dp[i - 1][j];
            else {
                dp[i][j] = dp[i - 1][j] + dp[i - 1][j - arr[i - 1]];
            }
        }
    }
    return dp[n][sum];
}

int main() {
    int T;
    scanf("%d", &T);
    while (T--) {
        int n;
        scanf("%d", &n);
        vector<int> arr;
        for (int i = 0; i < n; ++i) {
            int num;
            scanf("%d", &num);
            arr.push_back(num);
        }
        int sum;
        scanf("%d", &sum);
        printf("%d\n", countSubsets(arr, n, sum));
    }
    return 0;
}
```