

Count the total number of subsequences

```
#include<bits/stdc++.h>
using namespace std;

int printSub(int index, int sum, int target, int *arr, int n){

    if( index == n){
        // condition satisfied
        if( sum == target ){
            return 1;
        }
        // condition not satisfied
        else{
            return 0;
        }
    }
}

// pick
sum = sum + arr[index];
int l = printSub( index + 1, sum, target, arr , n);

sum = sum - arr[index];

// Not pick
int r = printSub( index + 1, sum, target, arr , n);

return l + r;
}

int main(){
    int arr[3] = {1, 2, 1};
    int n = 3;
    int target = 2 ;
    cout << printSub(0, 0, target, arr, n);

    return 0;
}
```

Here, we magnify the count with recursion and good coding practice of not involving extra global variables; for each call it returns the sum of count returned by the left and right part. For the base case, we have return count 1; if the sum is achieved and count as 0; if the base case is not achieved.

