class SubsetSum {

static int countSubsets(int[] num, int sum) {

//TODO: Write - Your - Code

return -1;

}

}

SOLUTION:

class SubsetSum {

static int countSubsets(int[] num, int sum) {

int n = num.length;

int[] dp = new int[sum + 1];

dp[0] = 1;

// with only one number, we can form a subset only when the required sum is equal to its value

for(int s=1; s <= sum ; s++) {

dp[s] = (num[0] == s ? 1 : 0);

}

// process all subsets for all sums

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

for(int s=sum; s >= 0; s--) {

if(s >= num[i])

dp[s] += dp[s-num[i]];

}

}

return dp[sum];

}

}