Problem Link:

<https://leetcode.com/problems/partition-equal-subset-sum/?envType=daily-question&envId=2025-04-07>

Solution:

class Solution {

public:

bool canPartition(vector<int>& nums) {

int total = 0;

for(int num : nums)

{

total += num;

}

if(total % 2 != 0)

{

return false;

}

int target = total / 2;

vector<bool> dp(target + 1, false);

dp[0] = true;

for(int num : nums)

{

for(int i = target; i >= num; --i)

{

dp[i] = dp[i] || dp[i - num];

}

}

return dp[target];

}

};