

Problem 3 Subset sum equal to target

```
def is_subset_sum(nums, target):  
    n = len(nums)  
  
    dp = [[False for _ in range(target + 1)] for _ in range(n + 1)]  
  
    for i in range(n + 1):  
        dp[i][0] = True  
  
    for i in range(1, n + 1):  
        for j in range(1, target + 1):  
            if nums[i - 1] <= j:  
                dp[i][j] = dp[i - 1][j] or dp[i - 1][j - nums[i - 1]]  
            else:  
                dp[i][j] = dp[i - 1][j]  
  
    return dp[n][target]
```

```
nums = [3, 34, 4, 12, 5, 2]
```

```
target_sum = 9
```

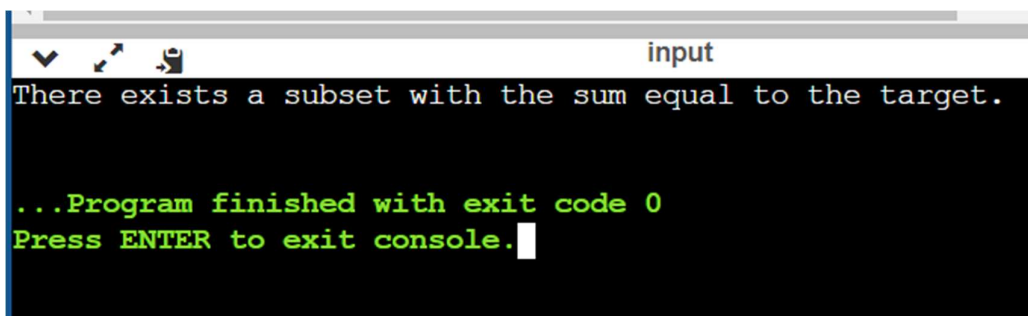
```
result = is_subset_sum(nums, target_sum)
```

```
if result:
```

```
    print("There exists a subset with the sum equal to the target.")
```

```
else:
```

```
    print("There is no subset with the sum equal to the target.")
```

A screenshot of a terminal window titled "input". The terminal has a black background with white text. The first line of output is "There exists a subset with the sum equal to the target.". The second line is "...Program finished with exit code 0". The third line is "Press ENTER to exit console." followed by a white cursor block.

```
input  
There exists a subset with the sum equal to the target.  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```