STUDENT REPORT

DETAILS

Name

D SUHASINI

Roll Number

3BR23CS040

EXPERIMENT

Title

TARGET SUM

Description

You are given a list of integers, and your task is to write a function that finds the two numbers in the list that add up to a specific target sum. You need to retum the indices of these two numbers.

Write a function that takes a list of Integers and a target sum as input and returns a list of two indices (0-based) of the numbers that add up to the target sum. Assume that there is exactly one solution, and you cannot use the same element twice

Sample Input:

2 7 11 15

9

Sample Output:

[0, 1]

Source Code:

```
def two_sum(nums, target):

  num_to_index = {}
  for i, num in enumerate(nums):
    complement = target - num
    if complement in num_to_index:
      return [num_to_index[complement], i]
    num_to_index[num] = i

  raise ValueError("No two numbers add up to the target sum.")
nums = list(map(int,input().split()))
target = int(input())
indices = two_sum(nums, target)
print(indices)
```

RESULT

5 / 5 Test Cases Passed | 100 %