



# STUDENT REPORT

## DETAILS

Name

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Roll Number

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## 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 return 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 %