



# STUDENT REPORT

## DETAILS

Name

Syeda Afifa

Roll Number

3BR23EE101

## 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 find_two_sum(nums, target):
    # Create a dictionary to store the numbers and their indices
    num_dict = {}

    # Loop through the list of numbers
    for i, num in enumerate(nums):
        # Calculate the complement of the current number
        complement = target - num

        # Check if the complement is already in the dictionary
        if complement in num_dict:
            # Return the indices of the two numbers
            return [num_dict[complement], i]

        # Add the current number and its index to the dictionary
        num_dict[num] = i

# Sample Input
nums = [2, 7, 11, 15]
target = 9

# Find and print the indices
result = find_two_sum(nums, target)
print(result)
```

RESULT

2 / 5 Test Cases Passed | 40 %