(2)

Given an array of integers nums and an integer target, return indices of the two numbers such that they add up to target. You may assume that each input would have exactly one solution and you may not use the same element twice. You can return the Answer in any order.

Ex-

Input: nums = [2, 7, 11, 15], target = 9
Out put: [0, 1]
Explantion: Because nums[0] + nums[1] == 9, we return [0, 1].

Ans:-

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

# Example usage:
nums = [2, 7, 11, 15]
target = 9
print (two_sum (nums, target)) #
Out put : (0, 1)
```

NAME: MOHAMMED.AKBER

Experiment: Assignment - II SLNO (37) Reg.NO: 182023-057

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(1) Given the names and grades for each student in a class of N students, store them in a nested list and print the name(s) of any student (s) having the second Lowest grade.

Note: If there are multiple students with the second Lowest grade, order their names alphabetically and print each name on a newLine

ex:

records = [["chi", 20.0], ["beta", 50.0] ["alpha", 50.0]] There are two students with that score: ["beta", "alpha"] Ordered alphabetically. the names are printed as:

alpha

beta

Answer:-

```
# Step1: Create a nested list
records = [["chi", 20.0], ["beta", 50.0] ["alpha", 50.0]]
# step2: sort the list based on grades
records sort (key = Lambda x: x[1])
# step 3: Find the second lowest grade
second_Lowest_grade = sorted (set (record [1] for record in
records)) [1]
# step 4: Extract names of students with the second lowest grade
students_with_second_lowest = [record [0] for record in records
if record [1] == second_lowest_grade]
# step5: Sort names alphabetically students_with_second_lowest.sort()
# step6: Print each name on a new line
for student in
students_with_second_lowest:
print (student)
```

Teacher's Signature