Assignment - II

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], ["beta", 50], ["alpha", 50.0]]
There are two students with that score ["beta", "alpha"] ordered alphabetically. The names are printed as alpha, beta.

Answer :-
```
# step 1: Create a nested list
    records = [["chi", 20.0], ["beta", 50.0], ["alpha", 50.0]]
# step 2: 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
# step 4: Extract names of student with the second
        lowest grade
    students - with - second - lowest = [record[0] for record
        in records if record[1] = second - lowest - grade]
# step 5: sort names alphabetically students - with - second
        - lowest sort (1)
# step 6: print each name on a new line
        for student in
    students - with - second - lowest:
        Print (student)
```

② Given an array of integers nums and an integer target return indices of the two numbers such that they add upto 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

output : [0,1]

Explantion : Because nums[0] + nums[1] = 9

we return [0,1]

Answer :-

```
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]
    num-dict [num] = i
# example usage :
nums = [2,7,11,15]
target = 9
Print [two-sum (nums, target)] #
out put : (0,1)
```