assign-2

February 18, 2024

[8]:
```
# Input the number of students
N = int(input("Enter the number of students: "))

# Initialize an empty list to store student names and grades
students = []

# Input student names and grades
for i in range(N):
    name = input("Enter the name of student: ")
    grade = float(input("Enter the grade of student: "))
    students.append([name, grade])

# Sort students based on grades
students.sort(key=lambda x: x[1])

# Find the second lowest grade
second_lowest_grade = None
for i in range(1, N):
    if students[i][1] > students[0][1]:
        second_lowest_grade = students[i][1]
        break

# Find students with the second lowest grade
second_lowest_students = [student[0] for student in students if student[1] ==␣
 ↪second_lowest_grade]

# Sort the names alphabetically
second_lowest_students.sort()

# Print the names
for name in second_lowest_students:
    print(name)
```

```
Enter the number of students: 3
Enter the name of student: sai
Enter the grade of student: 20
Enter the name of student: madhu
Enter the grade of student: 21
```

```
Enter the name of student: shiva
Enter the grade of student: 22
madhu
```

[17]:
```python
def two_sum(nums, target):
    # Create a dictionary to store the indices of elements
    num_indices = {}

    # Iterate through the array
    for i, num in enumerate(nums):
        # Calculate the complement needed to reach the target
        complement = target - num

        # Check if the complement exists in the dictionary
        if complement in num_indices:
            # Return the indices of the current element and its complement
            return [num_indices[complement], i]

        # Store the index of the current element in the dictionary
        num_indices[num] = i

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

[19]:
```python
two_sum([2,7,11,15],9)
```

[19]:
```
[0, 1]
```