Assignment-2

1) problem

```
if __name__ == "__main__":
    # Input the number of students
    n = int(input("Enter the number of students: "))
    # Create a nested list to store student names and grades
    students = []
    for _ in range(n):
        name = input("Enter the student's name: ")
        score = float(input("Enter the student's grade: "))
        students.append([name, score])

    # Sort the list of students by grade
    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

    # Print the names of students with the second lowest grade
    print("Students with the second lowest grade:")
    for student in students:
        if student[1] == second_lowest_grade:
            print(student[0])
```

Result

```
Enter the number of students: 3
Enter the student's name: chi
Enter the student's grade: 20
Enter the student's name: beta
Enter the student's grade: 50.0
Enter the student's name: alpha
Enter the student's grade: 50.0
Students with the second lowest grade:
beta
alpha
```

2) problem

```
def two_sum(nums, target):
    num_indices = {}
    for i, num in enumerate(nums):
        complement = target - num
        if complement in num_indices:
            return [num_indices[complement], i]
        num_indices[num] = i
    return None
# Example usage
nums = [2, 7, 11, 15]
target = 9
print(two_sum(nums, target))
```

Result

```
: def two_sum(nums, target):
      num_indices = {}
      for i, num in enumerate(nums):
          complement = target - num
          if complement in num_indices:
              return [num_indices[complement], i]
          num_indices[num] = i
      return None
  # Example usage
  nums = [2, 7, 11, 15]
  target = 9
  print(two_sum(nums, target))
```

```
[0, 1]
```