

Q NO.1:

Ans:-

```
def find_second_lowest(records):
```

```
    # Sort the records based on grades
```

```
    sorted_records = sorted(records, key=lambda x: x[1])
```

```
    # Find the second lowest grade
```

```
    second_lowest_grade = sorted(set([record[1] for record in sorted_records]))[1]
```

```
    # Collect names of students with the second lowest grade
```

```
    second_lowest_students = [record[0] for record in sorted_records if record[1] ==  
second_lowest_grade]
```

```
    # Sort the names alphabetically
```

```
    second_lowest_students.sort()
```

```
    return second_lowest_students
```

```
# Example records
```

```
records = [{"chi", 20.0}, {"beta", 50.0}, {"alpha", 50.0}]
```

```
# Find and print the names of students with the second lowest grade
```

```
result = find_second_lowest(records)
```

```
for name in result:
```

```
    print(name)
```

Q NO.2:

ANS:-

```
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 achieve the target
    complement = target - num

    # If the complement is in the dictionary, return the indices
    if complement in num_indices:
        return [num_indices[complement], i]

    # Otherwise, add the current number and its index to the dictionary
    num_indices[num] = i

# If no solution is found, return an empty list
return []

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