

모의고사

☰ 알고리즘	완전탐색
⌵ 레벨	1
📅 작성 일자	@September 20, 2024



스터디 그룹 코드

박건웅

```
# normal solution
def solution(answers):
    s1_response = [1,2,3,4,5]
    s1_score = 0

    s2_response = [2,1,2,3,2,4,2,5]
    s2_score = 0

    s3_response = [3,3,1,1,2,2,4,4,5,5]
    s3_score = 0

    for index in range(len(answers)):
        s1_index = index % len(s1_response)
        if answers[index] == s1_response[s1_index]:
            s1_score += 1

        s2_index = index % len(s2_response)
        if answers[index] == s2_response[s2_index]:
            s2_score += 1

        s3_index = index % len(s3_response)
        if answers[index] == s3_response[s3_index]:
            s3_score += 1

    dict_scores = {
        1: s1_score,
        2: s2_score,
        3: s3_score
    }

    answer = []
    for student in dict_scores:
        if len(answer) == 0:
            answer.append(student)
        else:
```

```

        if dict_scores[student] > dict_scores[answer[-1]]:
            answer = [student]
        elif dict_scores[student] == dict_scores[answer[-1]]:
            answer.append(student)
    answer.sort()

    return answer

# dictionary solution
def solution(answers):
    dict_students = {
        1: {
            'response': [1, 2, 3, 4, 5],
            'score': 0
        },
        2: {
            'response': [2, 1, 2, 3, 2, 4, 2, 5],
            'score': 0
        },
        3: {
            'response': [3, 3, 1, 1, 2, 2, 4, 4, 5, 5],
            'score': 0
        }
    }

    for index in range(len(answers)):
        for student in dict_students:
            student_index = index % len(dict_students[student]['response'])
            if dict_students[student]['response'][student_index] == answers[index]:
                dict_students[student]['score'] += 1

    answer = []
    for student in dict_students:
        if len(answer) == 0:
            answer.append(student)
        else:
            if dict_students[student]['score'] > dict_students[answer[-1]]['score']:
                answer = [student]
            elif dict_students[student]['score'] == dict_students[answer[-1]]['score']:
                answer.append(student)

```

```
answer.sort()
```

```
return answer
```

손동현

```
def solution(answers):
```

```
    math_1_score = 0
```

```
    math_2_score = 0
```

```
    math_3_score = 0
```

```
    math_1 = [1, 2, 3, 4, 5]
```

```
    math_2 = [2, 1, 2, 3, 2, 4, 2, 5]
```

```
    math_3 = [3, 3, 1, 1, 2, 2, 4, 4, 5, 5]
```

```
    for i in range(len(answers)):
```

```
        if math_1[i % 5] == answers[i]:
```

```
            math_1_score += 1
```

```
        if math_2[i % 8] == answers[i]:
```

```
            math_2_score += 1
```

```
        if math_3[i % 10] == answers[i]:
```

```
            math_3_score += 1
```

```
    max_score = max(math_1_score, math_2_score, math_3_score)
```

```
    top_students = []
```

```
    if math_1_score == max_score:
```

```
        top_students.append(1)
```

```
    if math_2_score == max_score:
```

```
        top_students.append(2)
```

```
    if math_3_score == max_score:
```

```
        top_students.append(3)
```

```
    return top_students
```

이다경

```
def def_answer(student, answers):
    ans = 0
    for i in range(0, len(answers)):
        if student[i % len(student)] == answers[i]:
            ans += 1

    return ans

def solution(answers):
    answer = []
    a1 = [1, 2, 3, 4, 5]
    a2 = [2, 1, 2, 3, 2, 4, 2, 5]
    a3 = [3, 3, 1, 1, 2, 2, 4, 4, 5, 5]

    a1_answer = def_answer(a1, answers)
    a2_answer = def_answer(a2, answers)
    a3_answer = def_answer(a3, answers)

    answer_list = [a1_answer, a2_answer, a3_answer]

    for i in range(len(answer_list)):
        if max(answer_list) == answer_list[i]:
            answer.append(i+1)

    return answer
```

김상민

```
def solution(answers):
    answer = []
    first = [1, 2, 3, 4, 5]
    second = [2, 1, 2, 3, 2, 4, 2, 5]
    third = [3, 3, 1, 1, 2, 2, 4, 4, 5, 5]

    cnt = [0, 0, 0]

    for i, k in enumerate(answers):
        if first[i % 5] == k:
```

```
        cnt[0] += 1
    if second[i % 8] == k:
        cnt[1] += 1
    if third[i % 10] == k:
        cnt[2] += 1

for i in range(len(cnt)):
    if max(cnt) == cnt[i]:
        answer.append(i + 1)

return answer
```