

GE19211 / GE23233 / GE23231 - PSPP/PUP

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Started on	Tuesday, 28 May 2024, 2:10 PM
State	Finished
Completed on	Tuesday, 28 May 2024, 2:12 PM
Time taken	2 mins 16 secs
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question **1**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

In the game of Scrabble™, each letter has points associated with it. The total score of a word is the sum of the scores of its letters. More common letters are worth fewer points while less common letters are worth more points. The points associated with each letter are shown below:

- Points Letters
- 1 A, E, I, L, N, O, R, S, T and U
- 2 D and G
- 3 B, C, M and P
- 4 F, H, V, W and Y
- 5 K
- 8 J and X
- 10 Q and Z

Write a program that computes and displays the Scrabble™ score for a word. Create a dictionary that maps from letters to point values. Then use the dictionary to compute the score.

A Scrabble™ board includes some squares that multiply the value of a letter or the value of an entire word. We will ignore these squares in this exercise.

Sample Input

REC

Sample Output

REC is worth 5 points.

For example:

Input	Result
REC	REC is worth 5 points.

Answer: (penalty regime: 0 %)

```
1 A = {'A': 1, 'E': 1, 'I': 1, 'L': 1, 'N': 1, 'O': 1, 'R': 1, 'S': 1, 'T': 1, 'U': 1,
2      'D': 2, 'G': 2,
3      'B': 3, 'C': 3, 'H': 3, 'P': 3,
4      'F': 4, 'H': 4, 'V': 4, 'W': 4, 'Y': 4,
5      'K': 5,
6      'J': 8, 'X': 8,
7      'Q': 10, 'Z': 10}
8 word = input().upper()
9 B = sum(A.get(letter, 0) for letter in word)
10 print(f"{word} is worth {B} points.")
```

	Input	Expected	Got	
✓	GOD	GOD is worth 5 points.	GOD is worth 5 points.	✓
✓	REC	REC is worth 5 points.	REC is worth 5 points.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Create a student dictionary for n students with the student name as key and their test mark assignment mark and lab mark as values. Do the following computations and display the result.

1. Identify the student with the highest average score
2. Identify the student who as the highest Assignment marks
3. Identify the student with the Lowest lab marks
4. Identify the student with the lowest average score

Note:

If more than one student has the same score display all the student names

Sample input:

4

James 67 89 56

Lalith 89 45 45

Ram 89 89 89

Sita 70 70 70

Sample Output:

Ram

James Ram

Lalith

Lalith

For example:

Input	Result
4	Ram
James 67 89 56	James Ram
Lalith 89 45 45	Lalith
Ram 89 89 89	Lalith
Sita 70 70 70	

Answer: (penalty regime: 0 %)

```
1 n = int(input())
2 students = {}
3 for _ in range(n):
4     name, test, assignment, lab = input().split()
5     students[name] = {'test': int(test), 'assignment': int(assignment), 'lab': int(lab)}
6 averages = {name: sum(info.values()) / 3 for name, info in students.items()}
7
8 a = max(averages.values())
9 A = sorted([name for name, avg in averages.items() if avg == a])
10
11 b = max([info['assignment'] for info in students.values()])
12 B = sorted([name for name, info in students.items() if info['assignment'] == b])
13
14 c = min([info['lab'] for info in students.values()])
15 C = sorted([name for name, info in students.items() if info['lab'] == c])
16
17 d = min(averages.values())
18 D = sorted([name for name, avg in averages.items() if avg == d])
19
20 print('\n'.join([" ".join(A), " ".join(B), " ".join(C), " ".join(D)]))
21
```

	Input	Expected	Got	
✓	4	Ram	Ram	✓
	James 67 89 56	James Ram	James Ram	
	Lalith 89 45 45	Lalith	Lalith	
	Ram 89 89 89	Lalith	Lalith	
	Sita 70 70 70			
✓	3	Shadhana	Shadhana	✓
	Raja 95 67 90	Shadhana	Shadhana	
	Aarav 89 90 90	Aarav Raja	Aarav Raja	
	Shadhana 95 95 91	Raja	Raja	

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

A sentence is a string of single-space separated words where each word consists only of lowercase letters. A word is uncommon if it appears exactly once in one of the sentences, and does not appear in the other sentence.

Given two sentences s1 and s2, return a list of all the uncommon words. You may return the answer in any order.

Example 1:

Input: s1 = "this apple is sweet", s2 = "this apple is sour"

Output: ["sweet","sour"]

Example 2:

Input: s1 = "apple apple", s2 = "banana"

Output: ["banana"]

Constraints:

1 <= s1.length, s2.length <= 200

s1 and s2 consist of lowercase English letters and spaces.

s1 and s2 do not have leading or trailing spaces.

All the words in s1 and s2 are separated by a single space.

Note:

Use dictionary to solve the problem

For example:

Input	Result
this apple is sweet	sweet sour
this apple is sour	
this apple is sour	

Answer: (penalty regime: 0 %)

```
1 s1, s2 = input().split(), input().split()
2 c1, c2 = {}, {}
3 for w in s1: c1[w] = c1.get(w, 0) + 1
4 for w in s2: c2[w] = c2.get(w, 0) + 1
5 A = [w for w, c in c1.items() if c == 1 and w not in c2]
6 A += [w for w, c in c2.items() if c == 1 and w not in c1]
7 print('A, end=" ')
```

	Input	Expected	Got	
✓	this apple is sweet	sweet sour	sweet sour	✓
	this apple is sour			
✓	apple apple	banana	banana	✓
	banana			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Given an array of names of candidates in an election. A candidate name in the array represents a vote cast to the candidate. Print the name of candidates received Max vote. If there is tie, print a lexicographically smaller name.

Examples:

Input: votes[] = ["John", "Johnny", "Jackie",

"Johnny", "John", "Jackie",

"Jamie", "Jamie", "John",

"Johnny", "Jamie", "Johnny",

"John"];

Output: John

We have four Candidates with name as 'John', 'Johnny', 'jamie', 'jackie'. The candidates John and Johnny get maximum votes. Since John is alphabetically smaller, we print it. Use dictionary to solve the above problem

Sample Input:

10

John

John

Johnny

Jamie

Jamie

Johnny

Jack

Johnny

Johnny

Jackie

Sample Output:

Johnny

Answer: (penalty regime: 0 %)

```
1 A = [input() for _ in range(int(input()))]
2 B = {name: A.count(name) for name in set(A)}
3 print(min(name for name, count in B.items() if count == max(B.values())))
```

	Input	Expected	Got	
✓	10	Johnny	Johnny	✓
	John			
	John			
	Johnny			
	Jamie			
	Jamie			
	Johnny			
	Jack			
	Johnny			
	Johnny			
	Jackie			
✓	6	Ida	Ida	✓
	Ida			
	Ida			
	Ida			
	Kiruba			
	Kiruba			
	Kiruba			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Give a dictionary with value lists, sort the keys by summation of values in value list.

Input: test_dict = {'Gfg': [6, 7, 4], 'best': [7, 6, 5]}

Output: {'Gfg': 17, 'best': 18}

Explanation: Sorted by sum, and replaced.

Input: test_dict = {'Gfg': [8, 8], 'best': [5, 5]}

Output: {'best': 10, 'Gfg': 16}

Explanation: Sorted by sum, and replaced.

Sample Input:

2

Gfg 6 7 4

Best 7 6 5

Sample Output

Gfg 17

Best 18

For example:

Input	Result
2	Gfg 17
Gfg 6 7 4	Best 18
Best 7 6 5	

Answer: (penalty regime: 0 %)

```
1 n = int(input())
2 test_dict = {key: sum(map(int, values)) for key, *values in (input().split() for _ in range(n))}
3 sorted_dict = {key: value for key, value in sorted(test_dict.items(), key=lambda x: x[1])}
4 for key, value in sorted_dict.items():
5     print(key, value)
```

	Input	Expected	Got	
✓	2	Gfg 17	Gfg 17	✓
	Gfg 6 7 4	Best 18	Best 18	
	Best 7 6 5			
✓	2	Best 10	Best 10	✓
	Gfg 6 6	Gfg 12	Gfg 12	
	Best 5 5			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Finish review

← Week8_MCQ

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