<u>Dashboard</u> / <u>My courses</u> / <u>PSPP/PUP</u> / <u>Experiments based on Dictionary and its operations.</u> / <u>Week8 Coding</u>

Started on	Thursday, 6 June 2024, 10:57 PM
	•
State	Finished
Completed on	Monday, 10 June 2024, 11:59 PM
Time taken	4 days 1 hour
Marks	4.00/5.00
Grade	80.00 out of 100.00

```
Question 1
Incorrect
Mark 1.00 out of 1.00
```

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 <u>dictionary</u> to solve the problem

For example:

Inpu	Input				t
	apple apple		sweet sour	sweet	sour

Answer: (penalty regime: 0 %)

```
x=input().split()
    y=input().split()
 3
    a=set(x)
    b=set(y)
 5 v if len(x)==len(a) and len(b)==len(y):
        com=a.intersection(b)
 6
        st=a.union(b)
 8
        p=s3t-com
        ans=" ".join(map(str,p))
 9
    else:
10 •
        ans=""
11
12 🔻
        for char in x:
13 🔻
            for char in y:
                if char not in ans:
14 🔻
                    ans=ans+char
15
   print(ans)
16
```

	Input	Expected	Got	
×	this apple is sweet	sweet sour	***Run error***	×
	this apple is sour		Traceback (most recent call last):	
			File "testerpython3", line 8, in <module></module>	
			p=s3t-com	
			۸۸۸	
			NameError: name 's3t' is not defined. Did you mean: 'st'?	

Testing was aborted due to error.

Your code must pass all tests to earn any marks. Try again.

Show differences

Incorrect

Marks for this submission: 0.00/1.00.

```
Question 2
Incorrect
Mark 0.00 out of 1.00
```

Create a student <u>dictionary</u> 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 %)

```
n=int(input())
 2
    sd={}
 3
    for i in range(n):
        name,tm,am,lm=input().split()
 5
        tm=int(tm)
        am=int(am)
 6
        lm=int(lm)
        sd[name]=(tm,am,lm)
    has=max(sum(marks/3 for marks in sd.values()))
10
    hass=[name for name, marks in sd.items() if sum(marks)/3 ==has]
    ham=max(sd.values(),key=lambda x: x[1])[1]
11
12
    hams=[name for name,marks in sd.items() if marks[1]==ham]
13
    llm=min(sd.values(),key=lambda x: x[2])[2]
    11ms=[name for name,marks in sd.items() if marks[2]==11m]
14
15
    las=min(sum(marks/3 for marks in sd.values()))
    lass=[name for name,marks in sd.items() if sum(marks)/3==las]
16
17
    hass.sort()
18
    hams.sort()
    11ms.sort()
19
    lass.sort()
20
21
    print(hass)
22
    print(hams)
23
    print(llms)
    print(lass)
24
```

	Input	Expected	Got	
×	4	Ram	***Run error***	×
	James 67 89 56	James Ram	Traceback (most recent call last):	
	Lalith 89 45 45	Lalith	File "testerpython3", line 9, in <module></module>	
	Ram 89 89 89	Lalith	has=max(sum(marks/3 for marks in sd.values()))	
	Sita 70 70 70		^^^^^^	
			File "testerpython3", line 9, in <genexpr></genexpr>	
			has=max(sum(marks/3 for marks in sd.values()))	
			~~~~	
			TypeError: unsupported operand type(s) for /: 'tuple' and 'int'	

Testing was aborted due to error.

Your code must pass all tests to earn any marks. Try again.

Show differences

Incorrect
Marks for this submission: 0.00/1.00.

```
Question 3
Correct
Mark 1.00 out of 1.00
```

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^M score for a word. Create a <u>dictionary</u> that maps from letters to point values. Then use the <u>dictionary</u> 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 %)

```
r=input()
    r=r.upper()
 3
    scores={
         "A":1,"E":1,"I":1,"L":1,"N":1,"O":1,"R":1,"S":1,"T":1,"U":1,
4
        "D":2, "G":2,
 5
 6
        "B":3,"C":3,"M":3,"P":3,
        "F":4,"H":4,"V":4,"W":4,"Y":4,
        "K":5,
"J":8,"X":8,
 8
9
         "Q":10,"Z":10
10
11
12
    result=0
    for letter in r:
13 •
14
        if letter in scores:
             result+=scores.get(letter)
15
   print(r,"is worth",result,"points.")
```

	Input	Expected	Got	
~	GOD	GOD is worth 5 points.	GOD is worth 5 points.	~
<b>~</b>	REC	REC is worth 5 points.	REC is worth 5 points.	~

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

```
Question 4
Correct
Mark 1.00 out of 1.00
```

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:**

Output: John

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

# Sample Input:

10

John

John

Johny

Jamie

Jamie

Johny

Jack

Johny

Johny Jackie

# **Sample Output:**

Johny

Answer: (penalty regime: 0 %)

```
1 → def winner():
2
        n=int(input())
3
        v=[input() for _ in range(n)]
4
        votesys={}
5
        for cand in v:
            if cand in votesys:
6
                votesys[cand]+=1
7
8
                votesys[cand]=1
10
        sorted_v=sorted(votesys.items(), key=lambda x:(-x[1],x[0]))
        print(sorted_v[0][0])
11
   winner()
```

	Input	Expected	Got	
<b>~</b>	10	Johny	Johny	~
	John			
	John			
	Johny			
	Jamie			
	Jamie			
	Johny			
	Jack			
	Johny			
	Johny			
	Jackie			
<b>~</b>	6	Ida	Ida	~
	Ida			
	Ida			
	Ida			
	Kiruba			
	Kiruba			
				1

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

```
Question 5
Correct
Mark 1.00 out of 1.00
```

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 %)

```
r=int(input())
    h=[]
    for i in range(r):
 3 🔻
         a=input()
 4
 5
         h.append(a)
    dict={}
 6
    for line in h:
 8
         part=line.split()
         key=part[0]
9
10
         value=list(map(int,part[1:]))
11
        dict[key]=sum(value)
12
   ans=sorted(dict.items() , key=lambda item:item[1])
13 v for key, value in ans:
print(key,value)
```

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

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

■ Week8_MCQ

Jump to...

Functions -