<u>Dashboard</u> / My courses / <u>CD19411-PPD-2022</u> / <u>WEEK_01-Introduction to python-Variables-Datatypes-Input/Output-Formatting</u> / <u>Week-1_CODING</u>

Started on	Wednesday, 28 February 2024, 10:30 AM
State	Finished
Completed on	Wednesday, 28 February 2024, 11:16 AM
Time taken	46 mins 21 secs
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

Question 1 Mark 1.00 out of 1.00

Write a program to convert strings to an integer and float and display its type.

Sample Input:

10

10.9

Sample Output:

10,<class 'int'>

10.9, <class 'float'>

Answer: (penalty regime: 0 %)

```
n1=int(input())
    n2=float(input())
   print(n1,type(n1),sep=",")
print("%0.1f"'%n2,type(n2),sep=",")
3
4
5
```

	Input	Expected	Got	
~	10 10.9	10, <class 'int'=""> 10.9,<class 'float'=""></class></class>	10, <class 'int'=""> 10.9,<class 'float'=""></class></class>	~
~	12 12.5	12, <class 'int'=""> 12.5,<class 'float'=""></class></class>	12, <class 'int'=""> 12.5,<class 'float'=""></class></class>	~
~	89 7.56	89, <class 'int'=""> 7.6,<class 'float'=""></class></class>	89, <class 'int'=""> 7.6,<class 'float'=""></class></class>	~
~	55000 56.2	55000, <class 'int'=""> 56.2,<class 'float'=""></class></class>	55000, <class 'int'=""> 56.2,<class 'float'=""></class></class>	~
~	2541 2541.679	2541, <class 'int'=""> 2541.7,<class 'float'=""></class></class>	2541, <class 'int'=""> 2541.7,<class 'float'=""></class></class>	~

Passed all tests!

Question 2
Correct
Mark 1.00 out of 1.00

In many jurisdictions, a small deposit is added to drink containers to encourage people to recycle them. In one particular jurisdiction, drink containers holding one liter or less have a \$0.10 deposit and drink containers holding more than one liter havea \$0.25 deposit. Write a program that reads the number of containers of each size(less and more) from the user. Your program should continue by computing and displaying the refund that will be received for returning those containers. Format the output sothat it includes a dollar sign and always displays exactly two decimal places.

Sample Input

10

20

Sample Output

Your total refund will be \$6.00.

For example:

Input	Result
20 20	Your total refund will be \$7.00.

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
~	20 20	Your total refund will be \$7.00.	Your total refund will be \$7.00.	~
~	11 22	Your total refund will be \$6.60.	Your total refund will be \$6.60.	~
~	123 200	Your total refund will be \$62.30.	Your total refund will be \$62.30.	~
~	76 38	Your total refund will be \$17.10.	Your total refund will be \$17.10.	~

Passed all tests!

Correct

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

Justin is a carpenter who works on an hourly basis. He works in a company where he is paid Rs 50 for an hour on weekdays and Rs 80 for an hour on weekends. He works 10 hrs more on weekdays than weekends. If the salary paid for him is given, write a program to find the number of hours he has worked on weekdays and weekends.

Hint:

If the final result(hrs) are in -ve convert that to +ve using abs() function

The abs() function returns the absolute value of the given number.

```
number = -20
absolute_number = abs(number) print(absolute_number)
# Output: 20
```

Sample Input:

450

Sample Output:

weekdays 10.38

weekend 0.38

For example:

Inp	ut	Result
450		weekdays 10.38 weekend 0.38

```
1 | s=int(input())

2 | x=(s-500)/130

3 | e=abs(x)

4 | d=e+10

5 | print(''weekdays %0.2f''%d)

6 | print(''weekend %0.2f''%e)
```

	Input	Expected	Got	
~	450	weekdays 10.38 weekend 0.38	weekdays 10.38 weekend 0.38	~
~	500	weekdays 10.00 weekend 0.00	weekdays 10.00 weekend 0.00	~
~	10000	weekdays 83.08 weekend 73.08	weekdays 83.08 weekend 73.08	~

 $_{Question}$ 4 Mark 1.00 out of 1.00

Write a simple python program to find the square root of a given floating point number. The output should be displayed with 3 decimal places.

Sample Input:

8.00

Sample Output:

2.828

For example:

Input	Result
8.00	2.828

Answer: (penalty regime: 0 %)

```
import math
n=float(input())
print("%0.3f"%(math.sqrt(n)))
```

	Input	Expected	Got	
~	8.00	2.828	2.828	~
~	14.00	3.742	3.742	~
~	4.00	2.000	2.000	~
~	487	22.068	22.068	~

Passed all tests!

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

Alfred buys an old scooter for Rs. X and spends Rs. Y on its repairs. If he sells the scooter for Rs. Z (Z>X+Y). Write a program tohelp Alfred to find his gain percent. Get all the above-mentioned values through the keyboard and find the gain percent.

Input Format:

The first line contains the Rs XThe

second line contains Rs YThe third

line contains Rs Z Sample Input:

10000

250

15000

Sample Output:

46.34 is the gain percent.

For example:

Input	Result
10000	46.34 is the gain percent.
250	
15000	

	Input	Expected	Got	
~	10000 250 15000	46.34 is the gain percent.	46.34 is the gain percent.	~
~	45500 500 60000	30.43 is the gain percent.	30.43 is the gain percent.	~
~	5000 0 7000	40.00 is the gain percent.	40.00 is the gain percent.	~

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Started on	Tuesday, 5 March 2024, 8:08 AM
State	Finished
Completed on	Tuesday, 5 March 2024, 8:26 AM
Time taken	17 mins 35 secs
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

 $_{\rm Question}~1$ Mark 1.00 out of 1.00

An online retailer sells two products: widgets and gizmos. Each widget weighs 75 grams. Each gizmo weighs 112 grams. Write a program that reads the number of widgets and the number of gizmos from the user. Then your program should compute and displaythe total weight of the parts.

Sample Input

10

20

Sample Output

The total weight of all these widgets and gizmos is 2990 grams.

For example:

Input	Result
10 20	The total weight of all these widgets and gizmos is 2990 grams.

Answer: (penalty regime: 0 %)

```
w = int(input())
  g = int(input())
ans = (w*75)+(g*112)
3
  print("The total weight of all these widgets and gizmos is %d grams." %ans)
```

	Input	Expected	Got	
~	10 20	The total weight of all these widgets and gizmos is 2990 grams.	The total weight of all these widgets and gizmos is 2990 grams.	~

Passed all tests!

Question 2
Correct
Mark 1.00 out of 1.00

In London, every year during Dasara there will be a very grand doll show. People try to invent new dolls of different varieties. The best-sold doll's creator will be awarded with a cash prize. So people broke their heads to create dolls innovatively. Knowing this competition, Mr.Lokpaul tried to create a doll that sings only when an even number is pressed and the number should not be zero and greater than 100.

IF Lokpaul wins print true, otherwise false.

Sample Input

10

Sample Output

True

Explanation:

Since 10 is an even number and a number between 0 and 100, True is printed

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
~	56	True	True	~

Passed all tests!

Correct

 $_{\text{Question}} \, 3$ Mark 1.00 out of 1.00

Mr.Ram has been given a problem kindly help him to solve it. The input of the program is either 0 or 1. IF 0 is the input he should $display \ "C" \ if \ 1 \ is \ the input \ it \ should \ display \ "D". There \ is \ a \ constraint \ that \ Mr. \ Ram \ should \ use \ either \ logical \ operators \ or \ arithmetic$ operators to solve the problem, not anything else.

Use ASCII values of C and D.

Input Format:

An integer x, 0<=x<=1..

Output Format:

output a single character "C" or "D" depending on the value of \boldsymbol{x} .

```
նորա #:1:
Output 1:C
Output 1:
```

```
Մորա 2:2:
Output1:D:
```

Answer: (penalty regime: 0 %)

```
x = int(input())
   if(x==0):
2 •
       print("C"
3
4 •
   ) else:
       print("D")
```

	Input	Expected	Got	
~	0	С	С	~
~	1	D	D	~

Passed all tests!



Correct

Question 4
Correct
Mark 1.00 out of 1.00

Mr. X's birthday is in next month. This time he is planning to invite N of his friends. He wants to distribute some chocolates to all of his friends after the party. He went to a shop to buy a packet of chocolates. At the chocolate shop, 4 packets are there with different numbers of chocolates. He wants to buy such a packet which contains a number of chocolates, which can be distributed equally among all of his friends. Help Mr. X to buy such a packet.

Input Given:

N-No of friends

P1,P2,P3 AND P4-No of chocolatesOUTPUT:

"True" if he can buy that packet and "False" if he can't buy that packet.

SAMPLE INPUT AND OUTPUT:

5

25

12

10

9

OUTPUT

True False True False

Answer: (penalty regime: 0 %)

	Input	Expected Got	
~	5	True False True True True False True True	
	25		
	23		
	20		
	10		
			- 1

Passed all tests!

Correct

Question 5
Correct
Mark 1.00 out of 1.00

In the 1800s, the battle of Troy was led by Hercules. He was a superstitious person. He believed that his crew can win the battle only if the total count of the weapons in hand is in multiple of 3 and the soldiers are in an even number of count. Given the total number of weapons and the soldier's count, Find whether the battle can be won or not according to Hercules's belief. If the battle can be won print True otherwise print False.

Input format:

Line 1 has the total number of weapons

Line 2 has the total number of Soldiers.

Output Format:

If the battle can be won print True otherwise print False.

Sample Input:

32

43

Sample Output:

False

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
~	32 43	False	False	~
~	273 7890	True	True	~
~	800 4590	False	False	~
~	6789 32996	True	True	~

Passed all tests!

orroct

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Started on	Tuesday, 5 March 2024, 8:48 AM
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Completed on	Tuesday, 5 March 2024, 9:26 AM
Time taken	38 mins 26 secs
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

```
Question 7
Correct
Mark 1.00 out of 1.00
```

In this exercise you will create a program that reads a letter of the alphabet from the user. If the user enters a, e, i, o or u then your program should display a message indicating that the entered letter is a vowel. If the user enters y then your program should display a message indicating that sometimes y is a vowel, and sometimes y is a consonant. Otherwise your program should display a message indicating that the letter is a consonant.

Sample Input 1i

Sample Output 1

It's a vowel.

Sample Input 2

v

Sample Output 2

Sometimes it's a vowel... Sometimes it's a consonant.

Sample Input3

c

Sample Output 3

It's a consonant.

For example:

Input	Result
y	Sometimes it's a vowel Sometimes it's a consonant.
с	It's a consonant.

```
| x = input()
| if(x in "aeiou"):
| print("It's a
| vowel.")
| elif(x == "y"):
| print("Sometimes it's a vowel... Sometimes it's a consonant.") else:
| print("It's a consonant.")
```

	Input	Expected	Got	
~	i	It's a vowel.	It's a vowel.	~
~	y	Sometimes it's a vowel Sometimes it's a consonant.	Sometimes it's a vowel Sometimes it's a consonant.	~
~	c	It's a consonant.	It's a consonant.	~

```
Question 2
Correct
Mark 1.00 out of 1.00
```

In the 1800s, the battle of Troy was led by Hercules. He was a superstitious person. He believed that his crew can win the battle only if the total count of the weapons in hand is in multiple of 3 and the soldiers are in an even number of count. Given the total number of weapons and the soldier's count, Find whether the battle can be won or not according to Hercules's belief. If the battle can be won print True otherwise print False.

Input format:

Line 1 has the total number of weapons

Line 2 has the total number of Soldiers.

Output Format:

If the battle can be won print True otherwise print False.

Sample Input:

32

43

Sample Output:

False

For example:

Input	Result
32 43	False

```
1 | w = int(input())
2 | s = int(input())
3 | print((w%3==0) and (s%2==0))
```

	Input	Expected	Got	
~	32 43	False	False	~
~	273 7890	True	True	~
~	800 4590	False	False	~

Question 3
Correct
Mark 1.00 out of 1.00

IN/OUT

Ms. Sita, the faculty handling programming lab for you is very strict. Your seniors have told you that she will not allow you to enter the week's lab if you have not completed atleast half the number of problems given last week. Many of you didn't understand this statement and so they requested the good programmers from your batch to write a program to find whether a student will be allowed into a week's lab given the number of problems given last week and the number of problems solved by the student in that week.

Input Format:

Input consists of 2 integers.

The first integer corresponds to the number of problems given and the second integer corresponds to the number of problems solved.

Output Format:

Output consists of the string "IN" or "OUT".

Sample Input and Output:

Input

8

3

Output

OUT

For example:

Result
OUT

	Input	Expected	Got	
~	8	OUT	OUT	~
~	8 5	IN	IN	~
~	20 9	OUT	OUT	~
~	50 31	IN	IN	~

Passed all tests!

 $_{Question}$ 4 Mark 1.00 out of 1.00

Write a program that reads an integer from the user. Then your program should display a message indicating whether the integer is even or odd.

Sample Input1:

Sample Output1:

5 is odd. Sample

Input2:

10

Sample Output2:

10 is even.

For example:

Input	Result	
5	5 is odd.	

Answer: (penalty regime: 0 %)

```
n = int(input())
if(n%2==0):
3
4 v else:
5
```

	Input	Expected	Got	
~	5	5 is odd.	5 is odd.	~
~	10	10 is even.	10 is even.	~
~	20	20 is even.	20 is even.	~

Passed all tests!

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

Write a program to find the eligibility of admission for a professional course based on the following criteria: Marks in

Maths >= 65

Marks in Physics >= 55

Marks in Chemistry >= 50

 \mathbf{Or}

Total in all three subjects >= 180

Sample Test Cases

Test Case 1

Input

70

60

80

Output

The candidate is eligible

Test Case 2

Input

50

80

80

Output

The candidate is eligible

Test Case 3

Input

50

60

40

Outpu

The candidate is not eligible

For example:

Input	Result
70	The candidate is eligible
60	
80	

```
1 m = int(input())
2 p = int(input())
3 c = int(input())
4 v if((m>=65 and p>=55 and c>=50) or ((m+p+c)>=180)): print("The candidate is eligible")
5 else:
7 print("The candidate is not eligible")
```

	Input	Expected	Got	
~	70	The candidate is eligible	The candidate is eligible	~
	60			
	80			
~	50	The candidate is eligible	The candidate is eligible	~
	80		_	
	80			
~	50	The candidate is not eligible	The candidate is not eligible	~
	60			
	40			
~	20	The candidate is not eligible	The candidate is not eligible	~
	10			
	25			

Passed all tests!

Correct

Jump to		

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Started on	Wednesday, 13 March 2024, 11:00 AM
State	Finished
Completed on	Wednesday, 13 March 2024, 7:39 PM
Time taken	8 hours 38 mins
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

Question 1 Mark 1.00 out of 1.00

Write a program that reads a positive integer, n, from the user and then displays the sum of all of the integers from 1 to n.

Sample Input

10

Sample Output

The sum of the first 10 positive integers is 55.0

For example:

Input	Result
10	The sum of the first 10 positive integers is 55.0

Answer: (penalty regime: 0 %)

```
x = int(input())
sum = sum + i
5
  print("The sum of the first %d positive integers is %0.1f"%(x,sum))
6
```

	Input	Expected	Got	
~	10	The sum of the first 10 positive integers is 55.0	The sum of the first 10 positive integers is 55.0	~
~	20	The sum of the first 20 positive integers is 210.0	The sum of the first 20 positive integers is 210.0	~

Passed all tests!

 $_{Question} 2$ Mark 1.00 out of 1.00

 $\label{lem:continuous} \textbf{Determine the factors of a number (i.e., all positive integer values that evenly divide into a number).}$

For example:

Input	Result
20	1 2 4 5 10 20

Answer: (penalty regime: 0 %)

```
x = int(input())
for i in range (1,x+1):
    if (x%i==0):
    print(i,end=" ")
```

	Input	Expected	Got	
~	20	1 2 4 5 10 20	1 2 4 5 10 20	~
~	5	1 5	1 5	~
~	13	1 13	1 13	~

Passed all tests!

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

Write a program to check whether a given number is a perfect number or not.

Perfect number is a positive number which sum of all positive divisors excluding that number is equal to that number.

For example, 6 is perfect number since divisor of 6 are 1, 2 and 3.

Sum of its divisor is 1 + 2 + 3 = 6

Sample Test Cases

Test Case 1

Input

_

Output

YES

Test Case 2

45

Output

NO

For example:

Input	Result
6	YES

	Input	Expected	Got	
~	6	YES	YES	~

	Input	Expected	Got	
~	45	NO	NO	~
~	496	YES	YES	~
~	123	NO	NO	~

Passed all tests!

Question 4
Correct
Mark 1.00 out of 1.00

A number is stable if each digit occur the same number of times.i.e, the frequency of each digit in the number is the same. For e.g. 2277,4004,11,23,583835,1010 are examples for stable numbers.

Similarly, a number is unstable if the frequency of each digit in the number is NOT same.

Sample Input:

2277

Sample Output:

Stable Number

Sample Input 2:

121

Sample Output 2:

Unstable Number

For example:

Input	Result
2277	Stable Number

Answer: (penalty regime: 0 %)

```
from collections import Counter
 2 v def isStable(x):
3
        s = str(x)
 4
        count = Counter(s)
        return len(set(count.values())) == 1
 5
 7
    x = int(input())
 8 v if isStable(x):
        print("Stable Number")
 9
10 v else:
11
        print("Unstable Number")
12
```

	Input	Expected	Got	
~	9988	Stable Number	Stable Number	~
~	2277	Stable Number	Stable Number	~
~	1233	Unstable Number	Unstable Number	~

Passed all tests!

Correct

Question 5
Correct
Mark 1.00 out of 1.00

In this exercise you will create a program that computes the average of a collection of values entered by the user. The user will enter 0 as a sentinel value to indicate that no further values will be provided. Your program should display an appropriate error message if the first value entered by the user is 0.

Hint: Because the 0 marks the end of the input it should not be included in the average. Sample

Input

1

2

3

4

5

0

The average is 3.0.

Answer: (penalty regime: 0 %)

```
sum = 0
c = 0
x = int(input())
while (x!=0):
sum += x
c += 1
x = int(input())
print("The average is %0_1f_"(sum/c))
```

	Input	Expected	Got	
~	1	The average is 3.0.	The average is 3.0.	~
	2			
	3			
	4			
	5			
	0			
~	11	The average is 33.0.	The average is 33.0.	~
	22			
	33			
	44			
	55			
	0			

Passed all tests!

Correct

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Started on	Thursday, 11 April 2024, 5:34 PM
State	Finished
Completed on	Thursday, 11 April 2024, 5:54 PM
Time taken	19 mins 50 secs
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

```
Question 1
Correct
Mark 1.00 out of 1.00
```

Program to print all the distinct elements in an array. Distinct elements are nothing but the unique (non-duplicate) elements present in the given array.

Input Format:

First line take an Integer input from stdin which is array length n.Second

line take n Integers which is inputs of array.

Output Format:

Print the Distinct Elements in Array in single line which is space Separated Example

Input:

5

12234

Output:

1234

Example Input:

6

112233

Output:

123

For example:

Input	Result
5	1 2 3 4
1	
2	
2	
3	
4	

```
n = int(input())
2
    arr = []
 3
  v for i in range(0,n):
4
       x = int(input())
5
       arr.append(x)
   arr = set(arr)
6
   for i in arr:
 7
        print(i,end = " ")
8
9
10
```

Input Expected Got S				1	
1 2 2 3 4 4		Input	Expected	Got	
1 2 2 3 4 4	~	5	1234	1 2 3 4	~
2 3 4 6 123 1 1 2 2 3 3 3 5 1122 1122 11 22 11 22 11 22 11 22 11 22 11 22 3 4 5 1 2 3 4 5 1 2 3 4		1			
2 3 4 6 123 1 1 2 2 3 3 3 5 1122 1122 11 22 11 22 11 22 11 22 11 22 11 22 3 4 5 1 2 3 4 5 1 2 3 4		2			
3 4 6 123 1 1 2 2 3 3 3 5 1122 1122 11 22 11 22 11 22 11 22 11 22 11 22 3 4 5 1 2 3 4 5 1 2 3 4					
4					
1 1 2 2 2 3 3 3					
1 2 2 3 3 3 3	~	6	1 2 3	1 2 3	~
2 2 3 3 3 3		1			
2 3 3 3		1			
3 3 3 V 5 11 22 11 22 11 22 11 V 10 1 3 4 5 1 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4		2			
3		2			
5 11 22 11 22 V 11 22 11 22 11 V 10 1 3 4 5 1 3 4 5 V 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 V		3			
11 22 11 22 11		3			
22 11 22 11 10 1 2 3 4 5 1 2 3 4 5	~	5	11 22	11 22	~
11 22 11		11			
22 11 10 1 2 3 4 5 1 2 3 4 5		22			
11		11			
10 1 3 4 5 1 3 4 5 V 1 2 3 4 5 1 3 4 5 V 1 2 3 4 4 5 1 3 4 5 V		22			
1 2 3 4 5 1 2 3 4 4		11			
2 3 4 5 1 2 3 4	~	10	1 3 4 5	1 3 4 5	~
3 4 5 1 2 3 4		1			
4 5 1 2 3 4					
5 1 2 3 4					
1 2 3 4					
2 3 4		5			
3 4		1			
4		2			
		3			
		4			
5		5			

Passed all tests!

```
_{\text{Question}} 2
Correct
Mark 1.00 out of 1.00
```

A teacher in a school entered marks in an array. But mistakenly the teacher repeated the marks twice in between the array. Help the teacher to find how many elements are duplicated in an array

Input:

 $\boldsymbol{n}-\boldsymbol{n}$ umber of elements and the elements to be stored in an array.

Output:

d- number of duplicate elements

Sample Test Case

Input

8

21 35 56 67 67 89 89 90

Output

Explanation

The numbers 67 and 89 are repeated, so count is 2

Answer: (penalty regime: 0 %)

```
n = int(input())
2
   s = input() count
3
   = 0
  arr = s.split()
4
5 \cdot |  for i in range(0,n-1):
       if(arr[i]==arr[i+1]
6 •
7
            count = count+1
  print(count)
```

	Input	Expected	Got	
~	8 21 35 56 67 67 89 89 90	2	2	~
~	12 56 56 78 78 90 90 95 97 97 99 99 89	5	5	~
~	4 67 67 89 90	1	1	~

Passed all tests!

Question 3
Correct
Mark 1.00 out of 1.00

An array is monotonic if it is either monotone increasing or monotone decreasing.
An array A is monotone increasing if for all i <= j, A[i] >= A[j].

 $Write \ a \ program \ if \ n \ array \ is \ monotonic \ or \ not. \ Print \ "True" \ if \ is \ monotonic \ or \ "False" \ if \ it \ is \ not. \ Array \ can \ be \ monotone \ increasing \ or \ decreasing.$

Input Format:

First line n-get number of elements Next

n Lines is the array of elementsOutput

Format:

True, if array is monotone increasing or decreasing.

otherwise False is printed

Sample Input1

4

5

6

7

8

Sample Output1

True

Sample Input2

4

6

3

_

Sample Output2

True

Sample Input 3

6

7

8

Sample Output3

False

For example:

Input	Result	
4	True	
6		
5		
4		
3		

```
1 | n = int(input())
2 | arr = []
```

```
vfor i in range(0,n):
x = int(input())
arr.append(x)
sort = sorted(arr)
rev = sort.reverse()8 vif(sort==arr):
9print("True") 10 velif(rev==arr):
11print("True") 12 velse:
13print("False")
```

	Input	Expected	Got	
~	4	True	True	~
	6			
	5			
	4			
	3			
~	4	False	False	~
	3			
	5			
	7			
	9			
~	4	False	False	~
	1			
	6			
	9			
	2			
~	4	True	True	~
	9			
	6			
	4			
	2			
~	3	False	False	~
	2			
	1			
	4			

Passed all tests!

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

Create a program that reads integers from the user until a -99 is entered. Once all of the integers have been read your program should display all of the negative numbers, followed by all of the zeros, followed by all of the positive numbers. Within each group, the numbers should be displayed in the same order that they were entered by the user. For example, if the user enters the values 3, -4, 1,0, -1,0, and -2 then your program should output the values -4, -1, -2, 0, 0, 3, and 1. Your program should display each value on its own line.(-99 is not included in the final display)

Sample Input

0

5

10

-15

-20

-99

Sample Output

-15

-20

0

5

10

For example:

Input	Result
0	-15
5	-20
10	0
-15	5
-20	10
-99	

```
x = int(input())
 2
    n = 0
    arr = [0]
 3
    while (x!=-99):
        arr[n] = x
 5
         x = int(input())
 6
        arr.append(x)
 8
        n = n + 1
 Q
    temp = 0
10 •
    for i in range (0,n):
        for j in range(i,n):
11 •
             <mark>if</mark>(arr[i]>arr[j]):
12 •
                 temp = arr[i]
13
                 arr[i] = arr[j]
14
                 arr[j] = temp
15
    temp = arr[0]
16
    arr[0] =
17
    arr[1] arr[1]
18
    = temp
19 •
    for k in range (0,n):
```

	Input	Expected	Got	
~	0	-15	-15	~
	5	-20	-20	
	10	0	0	
	-15	5	5	
	-20	10	10	
	-99			
~	10	-40	-40	~
	20	-50	-50	
	30	0	0	
	-40	10	10	
	-50	20	20	
	0	30	30	
	-99			
	1	I		

Passed all tests!

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

Given a list and we have to find the index/position of minimum and maximum elements of a list in Python.

```
irflishist[10, [1,02, 10, 2,20], 3, 20]
```

then it must print

1

20

First line of input is no of elements in a list

Followed by n inputs one by one.

Output line 1 contains index of minimum element

Output line 2 contains index of maximum element

Note: if more than one element is minimum / maximum then first index will be considered.

For example:

Input	Result		
3	0		
10	1		
20			
15			

	Input	Expected	Got	
~	3	0	0	~
	10	1	1	
	20			
	15			

	Input	Expected	Got	
~	5	4	4	~
	12	2	2	
	15			
	85			
	65			
	11			
~	6	5	5	~
	6	0	0	
	5			
	4			
	3			
	2			
	1			

Passed all tests!

	to	

$\underline{Dashboard} \ / \ My \ courses \ / \ \underline{CD19411\text{-}PPD\text{-}2022} \ / \ \underline{WEEK_06\text{-}Strings} \ / \ \underline{WEEK-06_CODING}$

Started on	Friday, 5 April 2024, 12:20 PM
State	Finished
Completed on	Friday, 5 April 2024, 1:20 PM
Time taken	1 hour
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

```
Question 7
Correct
Mark 1.00 out of 1.00
```

Given a string, determine if it is a palindrome, considering only alphanumeric characters and ignoring cases.

Note: For the purpose of this problem, we define empty string as valid palindrome.

Example 1:

```
Input:
A man, a plan, a canal: Panama

Output:1

Output:
```

Example 2:

```
Input:
Input:
Tace area!

Output:0

Output:
```

Constraints:

• s consists only of printable ASCII characters.

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
~	A man, a plan, a canal: Panama	1	1	~
~	race a car	0	0	~

Passed all tests!

Correct

 $_{Question} 2$ Mark 1.00 out of 1.00

Given a string s consisting of some words separated by some number of spaces, return the length of the last word in the string.

A word is a maximal substring consisting of non-space characters only.

For example:

Input	Result
Hello World	5
fly me to the moon	4

Answer: (penalty regime: 0 %)

```
x = input()
x = x[::-1]
 2
3 | n = v | for c in x:
5 v | if(c=="""):
 3
    n = 0
 7 •
                  break
 8
            else:
                  n += 1
    print(n)
10
```

Input Expected Got Hello World

Passed all tests!

Question 3Mark 1.00 out of 1.00

Find if a String2 is substring of String1. If it is, return the index of the first occurrence. else return -1.

Sample Input 1

thistest123string 123

Sample Output 1

Answer: (penalty regime: 0 %)

```
x = input()
2 | y = input()
3 | n = x.find(y)
4 | print(n)
```

	Input	Expected	Got	
~	thistest123string 123	8	8	~

Passed all tests!

 $_{Question}$ 4 Mark 1.00 out of 1.00

Write a code to reverse the case of a character input

Input Format:

Single character Input

Output Format:

Reversed character

Example Input:

R

Output:

Example Input:

Output:

 \mathbf{A}

For example:

Input	Result
R	r
a	A

Answer: (penalty regime: 0 %)

```
x = input()
2 v if(x.islower()):
3
      print(x.upper())
     print(x.lower())
```

Input Expected Got ~ ~

Passed all tests!

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

Write a program to get 3 strings as input.

In the 1st string, replace the vowels with "

In the 2nd string, replace the consonants with *

In the third string, convert the lowercase letters to upper case.

Input Format:

Take 3 Strings from stdin

Output Format:

- In the 1st string, replace the vowels with "
- In the 2nd string, replace the consonants with *
- In the third string, convert the lowercase letters to upper case.

Example Input:

Hello

Hi

GoodMorning

Output:

H"ll"

*i

GOODMORNIN

 \mathbf{G}

Answer: (penalty regime: 0 %)

```
x1 = input()
    x2 = input()
    x3 = input()
k = ****
3
 4
   m = "*"
 5
6 v for c in x1:
7 v if(c in "aeiou"):
 8
             x1 = x1.replace(c,k)
    print(x1)
9
10 •
   for b in x2:
         if(b in "aeiou"):
11 •
             continue
12
         else:
13 v
             x2 = x2.replace(b,m)
14
    print(x2)
15
    print(x3.upper())
```

	Input	Expected	Got	
~	Не110	н''11''	н''11''	~
	Hi	*i	*i	
	GoodMorning	GOODMORNIN	GOODMORNIN	
		G	G	

Passed all tests!

<u>Dashboard</u> / My courses / <u>CD19411-PPD-2022</u> / <u>WEEK_07-Functions</u> / <u>WEEK-07_CODING</u>

Started on	Friday, 26 April 2024, 9:55 PM
State	Finished
Completed on	Friday, 26 April 2024, 10:37 PM
Time taken	42 mins 10 secs
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

```
Question 7
Correct
Mark 1.00 out of 1.00
```

Given an integer n, return an list of length n+1 such that for each i ($0 \le i \le n$), ans[i] is the number of 1's in the binary representation of i.

Example:

Example2:

```
Imput n = 5
Output [0,1,1,2,1,2]
Explanation: 0 --> 0
Explanation:
2 --> 10
3 --> 11
4 --> 100
5 --> 101
```

Note: Complete the given function alone

For example:

Test	Result
print(CountingBits(5))	[0, 1, 1, 2, 1, 2]

Answer: (penalty regime: 0 %)

```
Reset answer
```

```
1 vdef | CountingBits(n):
2result = [0] * (n + 1) 3 for i in range(n + 1):
result[i] = bin(i).count('1')
return | result
```

	Test	Expected	Got	
~	print(CountingBits(2))	[0, 1, 1]	[0, 1, 1]	~
~	print(CountingBits(5))	[0, 1, 1, 2, 1, 2]	[0, 1, 1, 2, 1, 2]	~

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

 $_{\text{Question}} \; 2$ Correct Mark 1.00 out of 1.00

Write a function that takes three numbers as parameters, and returns the median value of those parameters as its result.

Answer: (penalty regime: 0 %)

vdef median(a, b, c): nums = [a, b, c] nums.sort() return nums[1]

Reset answer

	Test	Expected	Got	
~	print(median(10, 20, 30))	20	20	~
~	print(median(60, 50, 40))	50	50	~
~	print(median(70, 90, 80))	80	80	~

Passed all tests!

```
_{\text{Question}} \, 3
Mark 1.00 out of 1.00
```

A prime number is an integer greater than one that is only divisible by one and itself. Write a function that determines whether or not its parameter is prime, returning True if it is, and False otherwise.

Answer: (penalty regime: 0 %)

```
Reset answer
 1 def isPrime(n):
 2 🔻
         if n \ll 1:
              return False
 3
          elif n <= 3:
              return True
 5
          elif n % 2 == 0 or n % 3 == 0:
 6 •
         return False

i = 5
 7
 8
          while i * i <= n:
 9 •
              if n \% i == 0 \text{ or } n \% (i + 2) == 0:
10 •
                   return False
11
              i += 6
12
         return True
13
14
15
```

	Test	Expected	Got	
~	print(isPrime(1))	False	False	~
~	print(isPrime(2))	True	True	~
~	print(isPrime(3))	True	True	~

Passed all tests!

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

A string with parentheses is well bracketed if all parentheses are matched: every opening bracket has a matching closing bracket and vice versa.

Write a Python function wellbracketed(s) that takes a string s containing parentheses and returns True if s is well bracketed and False otherwise.

Hint: Keep track of the nesting depth of brackets. Initially the depth is 0. The depth increases with each opening bracket and decreases with each closing bracket. What are the constraints on the value of the nesting depth for thestring to be wellbracketed?

Here are some examples to show how your function should work.

```
>>> wellbracketed("22)")
False
>>> wellbracketed("(a+b)(a-b)")
True
>>> wellbracketed("(a(b+c)-d)((e+f)")
False
```

Answer: (penalty regime: 0 %)

```
Reset answer
```

```
1 v def wellbracketed(s):
        depth = 0
 2
 3 •
        for char in s:
 4 •
             if char ==
                 '(':depth
 5
 6
                 += 1
 7
             elif char == ')':
                 depth -= 1 if
 8
                 depth < 0:
                     return False
10
        return depth == 0
```

	Test	Expected	Got	
~	print(wellbracketed("22)"))	False	False	~
~	print(wellbracketed("(a+b)(a-b)"))	True	True	~
~	print(wellbracketed("(a(b+c)-d)((e+f)"))	False	False	~

Passed all tests!

Question 5
Correct
Mark 1.00 out of 1.00

Euclid was a Greek mathematician who lived approximately 2,300 years ago. His algorithm for computing the greatest common divisor of two positive integers, a and b, is both efficient and recursive. It is outlined below:

If b is 0 then

eturn a

Else

Set c equal to the remainder when a is divided by \boldsymbol{b}

Return the greatest common divisor of b and c

Write a program that implements Euclid's algorithm and uses it to determine the greatest common divisor of two integers entered by the user. Test your program with some very large integers. The result will be computed quickly, even for huge numbers consisting of hundreds of digits, because Euclid's algorithm is extremely efficient.

Answer: (penalty regime: 0 %)

```
1 ▼
   def euclid_gcd(a, b):
2 •
       if b == 0:
3
           return a
4
       else:
5
           return euclid_gcd(b, a % b)
6
7
  a = int(input())
8
  b = int(input())
  print(euclid_gcd(a, b))
```

	Input	Expected	Got	
~	8 12	4	4	~
~	720 1000	40	40	~

Passed all tests!

~

Correct

Marks for this submission: 1.00/1.00.

▼ Week-07_MCQ

Jump to...

<u>Dashboard</u> / My courses / <u>CD19411-PPD-2022</u> / <u>WEEK_08-Tuple</u> / <u>WEEK-08_CODING</u>

Started on	Friday, 3 May 2024, 12:10 PM
State	Finished
Completed on	Friday, 3 May 2024, 1:02 PM
Time taken	51 mins 29 secs
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

Question 1 Mark 1.00 out of 1.00

Write a program to read a string and a character and find the whether the character is available in the string or not. Print True if the character is present in the string, False otherwise.

Sample Input

Rakalakshmi

Sample Output

True

Sample Input

Rakalakshmi

Sample Output

False

Answer: (penalty regime: 0 %)

```
x = input() c
   = input()
3
   print(c in x)
4
```

	Input	Expected	Got	
~	Rajalakshmi a	True	True	~
~	Rajalakshmi b	False	False	~

Passed all tests!

```
Question 2
Correct
Mark 1.00 out of 1.00
```

Write a python program to find the the total and average of the students mark. print the total and average of each student as tuple. Input: first line no.of student, next n * 4 line student marks(four lines for each tuple)

 $Average: (32.50,\!47.25,\!63.75)$

For example:

Input	Result
3	Total: (130, 189, 255)
20	Average : (32.5, 47.25, 63.75)
30	
35	
45	
30	
54	
60	
45	
50	
60	
70	
75	

Answer: (penalty regime: 0%)

```
n = int(input())
 1
2
    s = []
 3
    \mathbf{a} = []
 4 •
    for i in range (0,n):
 5
          sum = 0
6 ·
7
          for j in range (0,4):
              x = int(input())
 8
              sum = sum + x
 9
          s.append(sum)
     a.append(sum/4)
print("Total :",end = " ")
10
11
    print(tuple(s))
12
    print("Average :",end = "
") print(tuple(a))
13
14
15
16
```

		_	_	
	Input	Expected	Got	
~	3	Total : (130, 189, 255)	Total: (130, 189, 255)	~
	20	Average : (32.5, 47.25, 63.75)	Average: (32.5, 47.25, 63.75)	
	30			
	35			
	45			
	30			
	54			
	60			
	45			
	50			
	60			
	70			
	75			
~	2	Total : (85, 100)	Total : (85, 100)	~
	30	Average : (21.25, 25.0)	Average : (21.25, 25.0)	
	20			
	25			
	10			
	25			
	10			
	15			
	50			
~	3	Total : (224, 182, 152)	Total : (224, 182, 152)	~
	54	Average : (56.0, 45.5, 38.0)	Average : (56.0, 45.5, 38.0)	
	65			
	85			
	20			
	20			
	38			
	46			
	78			
	56			
	42			
	36			
	18			

Passed all tests!

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

Write a program to unpack the following tuple into variables depends on the length of tuple (Max length = 10) and display each values separately.

Sample Input:

4

10

30

40

60

Sample Output:

a=10

b=30

c=40

d=60

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
~	4 10 30	a=10 b=30 c=40	a=10 b=30 c=40	~
	40 60	d=60	d=60	
~	9 15 60 75 85 90 70 35 25 45	a=15 b=60 c=75 d=85 e=90 f=70 g=35 h=25 i=45	a=15 b=60 c=75 d=85 e=90 f=70 g=35 h=25 i=45	*

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Write a Python program to check whether an element exists within a tuple. sample

input:

3: no of elements

REC

RIT

RSB

REC: ELEMENT TO

CHECKSAMPLE

OUTPUT:

True

Answer: (penalty regime: 0 %)

```
n = int(input())
2 | ar = []
3 v | for i in range (0,n):
        x = input()
4
        ar.append(x)
   tup = tuple(ar)
6
   k = input()
7
   # print(k in ar)
   print(k in tup)
```

	Input	Expected	Got	
>	3 RE C RII T RSB RE C	True	True	>
~	vijay kuma r rec	False	False	*

Passed all tests!

Correct

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

Create a tuple t1 with numbers 1 to 5, t2 with 6 to 10 and t3 with a string "REC". Concatenate

t1 and t2 and print the result.

Repeat the t3 10 times without using any looping statements. Expected $\,$

output:

```
(1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
('REC', 'REC', 'REC', 'REC', 'REC', 'REC', 'REC', 'REC', 'REC', 'REC')
```

Answer: (penalty regime: 0 %)

```
1 t1 = tuple(range(1, 6))

2 t2 = tuple(range(6, 11))

3 t3 = ("REC",) * 10

print(t1 + t2)

print(t3)
```

	Expected	Got	
~	(1, 2, 3, 4, 5, 6, 7, 8, 9, 10) (*REC*, *REC*, *REC*, *REC*, *REC*, *REC*,	(1, 2, 3, 4, 5, 6, 7, 8, 9, 10) (*REC*, *REC*, *REC*, *REC*, *REC*, *REC*,	~
	"REC", "REC")	"REC", "REC", "REC")	

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

▼ Week-08_MCQ

Jump to...

Week-09_MCQ ►

$\underline{Dashboard} \ / \ \underline{My \ courses} \ / \ \underline{CD19411\text{-}PPD\text{-}2022} \ / \ \underline{WEEK_09\text{-}Set} \ / \ \underline{WEEK-09_CODING}$

Started on	Friday, 3 May 2024, 1:02 PM
State	Finished
Completed on	Sunday, 5 May 2024, 10:56 AM
Time taken	1 day 21 hours
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

```
Question 1
Correct
Mark 1.00 out of 1.00
```

write a program to identify the common item present in three different set but not on the other set and display the items in the sorted order.

input:

10 50 40 60 30 40 30 70 60 30 20 50 10 75 80

output:

20 70 75 80

Answer: (penalty regime: 0 %)

```
def return_list(str1):
       str1=str1.replace("{"," ")
str1=str1.replace("}","")
 2
 3
       l=str1.split(",")
 4
 5
       list1=[]
 6
       for ele in 1:
 7
         list1.append(int(ele))
       return list1
 8
 9
    list1=input()
10
    list2=input()
11
    list3=input()
    result=[]
12
13
    list_of_list=[]
14
15
    list_of_list.append(return_list(list1))
    list_of_list.append(return_list(list2))
16
17
18
    list_of_list.append(return_list(list3))
19
20
   for j in list_of_list:
21
       for i in j:
22
         x=list_of_list[0].count(i)
23
         x+=list_of_list[1].count(i)
24
         x+=list_of_list[2].count(i)
25
         if x==1:
26
            result.append(i)
    result.sort()
27
   print("{",end="")
28
29
   for i in range(len(result)-1):
30
     print(result[i],end=",")
31
32
    print(result[-1],"}", sep=""")
33
```

	Test	Input	Expected	Got	
~	1	{10,50,40,60,30} {40,30,70,60,65} {20,50,10,75,80}	{20,65,70,75,80}	{20,65,70,75,80}	*
~	2	{10,15,20,40,50} {30,20,40,10,25} {40,50,10,45,55}	{15,25,30,45,55}	{15,25,30,45,55}	~

Passed all tests!

Correct

```
Question 2
Correct
Mark 1.00 out of 1.00
```

Two strings, a and b, are called anagrams if they contain all the same characters in the same frequencies. For example, the anagrams of CAT are CAT, ACT, TAC, TCA, ATC, and CTA.

Complete the function in the editor. If a and b are case-insensitive anagrams, print "Anagrams"; otherwise, print "Not Anagrams" instead.

Input Format

The first line contains a <u>string</u> denoting a. The second line contains a <u>string</u> denoting b.

Constraints

- $\cdot \qquad 1 \leq length(a), \, length(b) \leq 50$
- Strings a and b consist of English alphabetic characters.
- · The comparison should NOT be case sensitive.

Output Format

Print "Anagrams" if a and b are case-insensitive anagrams of each other; otherwise, print "Not Anagrams" instead.

Sample Input 0

anagram

margana

Sample Output 0

Anagrams

Explanation 0

Character	Frequency: anagram	Frequency: margana
A or a	3	3
G or g	1	1
N or n	1	1
M or m	1	1
R or r	1	1

The two strings contain all the same letters in the same frequencies, so we print "Anagrams".

Answer: (penalty regime: 0 %)

```
def anagram(a, b):
2
        a = a.lower()
3
        b = b.lower()
 4
        if sorted(a) == sorted(b):
5
            print("Anagrams")
 6
        else:
7
            print("Not Anagrams")
8
9
    a = input()
10
   b = input()
   anagram(a, b)
```

	Input	Expected	Got	
~	madam maDaM	Anagrams	Anagrams	~
~	DA D DA D	Anagrams	Anagrams	~
~	MAN MA M	Not Anagrams	Not Anagrams	~

Passed all tests!

Question 3
Correct
Mark 1.00 out of 1.00

A number is stable if each digit occur the same number of times.i.e, the frequency of each digit in the number is the same. For e.g. 2277,4004,11,23,583835,1010 are examples for stable numbers.

Similarly, a number is unstable if the frequency of each digit in the number is NOT same.

Sample Input:

2277

Sample Output:

Stable Number

Sample Input 2:

121

Sample Output 2:

Unstable Number

Answer: (penalty regime: 0 %)

```
def is_stable_number(number):
        num_str = str(number)
3
        digit_count = {}
 4
        for digit in num_str:
 5 ,
             if digit.isdigit():
                 digit_count[digit] = digit_count.get(digit, 0) + 1
 6
 7
        frequency = None
 8
        for count in digit_count.values():
 9
            if frequency is None:
10
                 frequency = count
             elif frequency != count:
11 •
12
                 return False
13
        return True
14
15
    number = int(input())
   if is_stable_number(number):
16
17
        print("Stable Number")
18
    else:
19
        print("Unstable Number")
20
```

	Input	Expected	Got	
~	9988	Stable Number	Stable Number	~
~	12	Stable Number	Stable Number	~
~	455	Unstable Number	Unstable Number	~

Passed all tests!

Correct

 $_{Question}$ 4 Correct Mark 1.00 out of 1.00

Take a complete sentence as an input and remove duplicate word in it and print (sorted order), then count all the words which have a length greater than 3 and print.

Input

we are good are we good

Output

are good we

Count = 1

For example:

Input	Result
welcome to rec rec cse ece	cse ece rec to welcome Count = 1

Answer: (penalty regime: 0 %)

```
def process_sentence(sentence):
1 •
                                                                                ---
        words = sentence.split()
2
3
        unique_words = sorted(set(words))
        unique_sentence = ' '.join(unique_words)
5
        count = sum(1 for word in unique_words if len(word) > 3)
6
        return unique_sentence, count
7
   input_sentence = input()
9
   unique_sentence, count = process_sentence(input_sentence)
10
   print(unique_sentence)
   print("Count = %d"%count)
```

	Input	Expected	Got	
~	we are good are we good	are good we Count = 1	are good we Count = 1	~
~	welcome to rec rec cse ece	cse ece rec to welcome Count = 1	cse ece rec to welcome Count = 1	~

Passed all tests!

```
_{\text{Question}} \; 5
Mark 1.00 out of 1.00
```

Given a sorted linked list, delete all duplicates such that each element appear only once.

Example 1:

```
Input:
1 1 2
Butput:
```

Example 2:

```
Input:
1 1 2 3 3
```

Answer: (penalty regime: 0 %)

```
arr = input().split() list1
= set(map(int, arr)) list =
2
3
   sorted(list1)
4 for num in list:
          print(num, end=" ")
5
6
```

	Test	Input	Expected	Got	
~	1	1 1 2	1 2	1 2	~
~	2	11233	1 2 3	1 2 3	~

Passed all tests!



Correct

Marks for this submission: 1.00/1.00.

▼ Week-09_MCQ

Jump to...

WEEK-09-Extra ►

$\underline{Dashboard} \ / \ My \ courses \ / \ \underline{CD19411\text{-}PPD\text{-}2022} \ / \ \underline{WEEK_10\text{-}Dictionary} \ / \ \underline{WEEK\text{-}10_CODING}$

Started on	Saturday, 4 May 2024, 10:20 PM
State	Finished
Completed on	Sunday, 5 May 2024, 10:31 AM
Time taken	12 hours 10 mins
Marks	7.00/7.00
Grade	e 50.00 out of 50.00 (100%)
Name	HEMALATHA R 2022-CSD-A

Question 1Correct Mark 1.00 out of 1.00

Multiply All the Items in a Dictionary

Input: Any input in Dictionary format (Ex: d={'A':10,'B':10,'C':239})

Output: multiplication of dictionary values (23900)

Answer: (penalty regime: 0 %)

```
1 v def multiply_dict_values(d):
2
       result = 1
3 •
       for value in d.values():
4
            result *= value
5
       return result
6
  d = { ^*A ^*: 10, ^*B ^*: 10, ^*C ^*: 239 }
7
8 print(multiply_dict_values(d))
```

	Input	Expected	Got	
~	d={ *A *:10, *B *:10, *C *:239	23900	23900	~

Passed all tests!

```
Question 2
Correct

Mark 1.00 out of 1.00
```

In the game of ScrabbleTM, 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 ScrabbleTM score for a word. Create a dictionary that maps from letters to point values. Then use the dictionary to compute the score.

A Scrabble TM 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.

Answer: (penalty regime: 0 %)

	Input	Expected	Got	
~	REC	REC is worth 5 points.	REC is worth 5 points.	~
~	RAJALAKSHM	RAJALAKSHMI is worth 27 points.	RAJALAKSHMI is worth 27 points.	~

Passed all tests!

Correct

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

A sentence is a list of words that are separated by a single space with no leading or trailing spaces. Each word consists of lowercase and uppercase English letters.

A sentence can be shuffled by appending the 1-indexed word position to each word then rearranging the words in the sentence. For example, the sentence "This is a sentence" can be shuffled as "sentence4 a3 is 2 This 1" or "is 2 sentence4 This 1 a3".

Given a shuffled sentence s containing no more than 9 words, reconstruct and return the original sentence.

Example 1:

Input:

is2 sentence4 This1 a3

Output:

This is a sentence

Explanation: Sort the words in s to their original positions "This1 is2 a3 sentence4", then remove the numbers.

Example 2:

Input:

Myself2 Me1 I4 and3

Output:

Me Myself and I

Explanation: Sort the words in s to their original positions "Me1 Myself2 and3 I4", then remove the numbers.

Constraints:

2 <= s.length <= 200

s consists of lowercase and uppercase English letters, spaces, and digits from 1 to 9. The

number of words in s is between 1 and 9.

The words in s are separated by a single space.

 \boldsymbol{s} contains no leading or trailing spaces.

Answer: (penalty regime: 0 %)

```
sentence=input()
sent_dict={}
3v for word in sentence.split(" "):
    n=len(word)
    word1=word[:n-1]
    sent_dict[int(word[n-1])]=word1
for i in sorted(sent_dict):
    print(sent_dict[i],end=" ")
```

	Input	Expected	Got	
~	is2 sentence4 This1 a3	This is a sentence	This is a sentence	~
~	Myself2 Me1 Vijay4 and3	Me Myself and Vijay	Me Myself and Vijay	~

Passed all tests!



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

A teacher wants to evaluate her class results for the subject she handles. She want to do the following analysis:

- 1. Display Class average
- 2. Display Maximum mark Roll no
- 3. Display Minimum mark Roll no

Kindly help her out. Use dictionary for storing the student details.Input

Format:

In line 1 no of students will be given

Followed by n lines containing student rollno and marks

Output Format:

Line 1 Class average

Line 2 Maximum mark Roll no

Line 3 Minimum mark Roll no

Sample Input:

4

0187

0299

03 45

0477

Output:

77

02

03

Answer: (penalty regime: 0 %)

```
1 def class_evaluation(n, student_details):
        class_average = sum(student_details.values()) / len(student_details)
        max_rollno = max(student_details, key=student_details.get)
3
4
        min_rollno = min(student_details, key=student_details.get)
5
        print(int(class_average))
6
        print(max_rollno)
7
        print(min_rollno)
8
    n = int(input())
10
   student_details = {}
11
    for _ in range(n):
12
        rollno, mark = map(str.strip, input().split())
        student_details[rollno] = int(mark)
13
14
   class_evaluation(n, student_details)
```

1

	Input	Expected	Got	
~	4	77	77	~
	01 87	02	02	
	02 99	03	03	
	03 45			
	04 77			

Passed all tests!

Question 5 Correct Mark 1.00 out of 1.00

Create a program that determines and displays the number of unique characters in a string entered by the user. For example, Hello, World! has 10 unique characters while zzz has only one unique character. Use a dictionary or set to solve this problem.

For example:

```
Input
Hello, World!
                    Result
10
```

Answer: (penalty regime: 0 %)

```
def unique_characters(s):
2
       unique = set(s)
3
       return len(unique)
4
5
   s = input()
  print(unique_characters(s))
```

	Input	Expected	Got	
~	Hello, World!	10	10	~
~	ZZZ	1	1	~
~	RECCSE	4	4	~
~	AAABBBCCC	3	3	~

Passed all tests!

Question 6 Correct

Mark 1.00 out of 1.00

To Check if a Given Key Exists in a Dictionary or Not

Input: Any dictionary format input (Ex: d={'A':1,'B':2,'C':3})

Enter Key to check: A

Output:

Key is present and value of the key is: (location)Present

Not Present # False Statement

Answer: (penalty regime: 0 %)

```
1 v def check_key(d, key):
2 •
        if key in d:
3
            print("Present")
4 •
        else:
5
            print("Not Present")
6
   d = { ^{*}A^{*}: 1, ^{*}B^{*}: 2, ^{*}C^{*}: 3}
7
  key = input()
9 check_key(d, key)
```

	Input	Expected		
~	A	Present	Present	~

Passed all tests!

Question 7
Correct
Mark 1.00 out of 1.00

Two words are anagrams if they contain all of the same letters, but in a different order. For example, "evil" and "live" are anagrams because each contains one "e", one "i", one "l", and one "v". Create a program that reads two strings from the user, determines whether or not they are anagrams, and reports the result.

Sample Input 1

evil

live

Sample Output 1

Those strings are anagrams.

Sample Input 2

meet

mat

Sample Output 2

Those strings are not anagrams.

Answer: (penalty regime: 0 %)

```
1 v def are_anagrams(s1, s2):
    s1 = s1.replace(" ", "").lower()
    s2 = s2.replace(" ", "").lower()
    return sorted(s1) == sorted(s2)

5    s1 = input()
    s2 = input()
8    v if are_anagrams(s1, s2):
        print("Those strings are anagrams.")
else:
    print("Those strings are not anagrams.")
```

	Input	Expected	Got	
~	evil live	Those strings are anagrams.	Those strings are anagrams.	~
~	meet met	Those strings are not anagrams.	Those strings are not anagrams.	~
~	rec cer	Those strings are anagrams.	Those strings are anagrams.	~

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

▼ Week-10_MCQ