RAJALAKSHMI ENGINEERING COLLEGE

RAJALAKSHMI NAGAR, THANDALAM – 602 105

RAJALAKSHMI
ENGINEERING COLLEGE
An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY, Chennai

Laboratory Record Notebook

Name : ……

Year / Branch / Section : ……

Register No. : ……

College Roll No. : ……

Semester : ……

Academic Year : ……

RAJALAKSHMI

ENGINEERING COLLEGE

An AUTONOMOUS institution

Affiliated to ANNA UNIVERSITY, Chennai

BONAFIDE CERTIFICATE

NAME : .....

ACADEMIC YEAR ..... SEMESTER ..... BRANCH .....

REGISTER NO.

Certified that this is the bonafide record of work done by the above student in the

..... Laboratory during the year 20 - 20

Signature of Faculty - in - Charge

Submitted for the Practical Examination held on .....

Internal Examiner External Examiner

INDEX

Name :____________________ Branch :________ Sec :_________ Roll No: ____________

S.No.	Date	Title	Page No.	Teacher's Signature / Remarks

Started on	Wednesday, 28 February 2024, 10:22 AM
State	Finished
Completed on	Wednesday, 28 February 2024, 11:28 AM
Time taken	1 hour 6 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

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:

Input	Result
450	weekdays 10.38 weekend 0.38

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
a=int(input())
b=(a-500)/130
c=abs(b)
d=c+10
print("weekdays %.2f"%d)
print("weekend %.2f"%c)
```

	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	✔
✔	6789	weekdays 58.38 weekend 48.38	weekdays 58.38 weekend 48.38	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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 have a $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 so that 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 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
a=int(input())
b=int(input())
c=(a*0.10)+(b*0.25)
print("Your total refund will be $%.2f." %(c))
```

	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

Marks for this submission: 1.00/1.00.

Question **3**

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 to help 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 X

The second line contains Rs Y

The third line contains Rs Z

Sample Input:

10000

250

15000

Sample Output:

46.34 is the gain percent.

For example:

Input	Result
10000 250 15000	46.34 is the gain percent.

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
a=int(input())
b=int(input())
c=int(input())
d=a+b
e=((c-d)/d)*100
print("%.2f is the gain percent."%e)
```

	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.	✔
✔	12500 5000 18000	2.86 is the gain percent.	2.86 is the gain percent.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

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 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
import math
a=float(input())
b=math.sqrt(a)
print("%.3f"%b)
```

	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! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

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 %)

Ace editor not ready. Perhaps reload page?
Falling back to raw text area.

```
a=input()
b=input()
c=int(a)
d=float(b)
e=round(d,1)
print("%d"%c,end=",")
print(type(c))
print(e, end=",")
print(type(d))
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ Week-1_MCQ

Jump to...

Week1 extra ►

Started on	Tuesday, 5 March 2024, 8:08 AM
State	Finished
Completed on	Tuesday, 5 March 2024, 8:23 AM
Time taken	15 mins 27 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

Correct

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 display the 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 %)

```
a=int(input())
b=int(input())
ans=(a*75)+(b*112)
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! ✔

Correct

Marks for this submission: 1.00/1.00.

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

Answer: (penalty regime: 0 %)

```
w=int(input())
s=int(input())
#if(w%3==0 and s%2==0)
print(w%3==0 and s%2==0)
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

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.

Hint:

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 x.

```
Input 1:
0
Output 1:
C
```

```
Input 2:
1

Output 1:
D
```

Answer: (penalty regime: 0 %)

```
a=int(input())
ans=67+a
an=chr(ans)
print(an)
```

	Input	Expected	Got	
✔	0	C	C	✔
✔	1	D	D	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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 chocolates

OUTPUT:

"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 %)

```
a=int(input())
p1=int(input())
p2=int(input())
p3=int(input())
p4=int(input())
print(p1%a==0 ,end=" ")
print(p2%a==0 ,end=" ")
print(p3%a==0 ,end=" ")
print(p4%a==0 ,end=" ")
```

	Input	Expected	Got	
✔	5 25 23 20 10	True False True True	True False True True	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

A team from the Rotract club had planned to conduct a rally to create awareness among the Coimbatore people to donate blood. They conducted the rally successfully. Many of the Coimbatore people realized it and came forward to donate their blood to nearby blood banks. The eligibility criteria for donating blood are people should be above or equal to 18 and his/ her weight should be above 40. There was a huge crowd and staff in the blood bank found it difficult to manage the crowd. So they decided to keep a system and ask the people to enter their age and weight in the system. If a person is eligible he/she will be allowed inside.

Write a program and feed it to the system to find whether a person is eligible or not.

Input Format:

Input consists of two integers that correspond to the age and weight of a person respectively.

Output Format:

Display True(IF ELIGIBLE)

Display False (if not eligible)

Sample Input

19

45

Sample Output

True

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
print((a>17)and(b>40))
```

	Input	Expected	Got	
✔	19 45	True	True	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ Week-2_MCQ

Jump to...

WEEK-02 Extra ►

Started on	Tuesday, 5 March 2024, 8:51 AM
State	Finished
Completed on	Tuesday, 5 March 2024, 9:02 AM
Time taken	10 mins 56 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

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:

Input	Result
8 3	OUT

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
c=a//2
if(b>c):
    print("IN")
else:
    print("OUT")
```

	Input	Expected	Got	
✔	8 3	OUT	OUT	✔
✔	8 5	IN	IN	✔
✔	20 9	OUT	OUT	✔
✔	50 31	IN	IN	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

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

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

Output

The candidate is not eligible

For example:

Input	Result
70 60 80	The candidate is eligible

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
c=int(input())

if((a>64)and(b>54)and(c>49))or((a+b+c)>179):
    print("The candidate is eligible")
else:
    print("The candidate is not eligible")

```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

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

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
print((a%3==0)and(b%2==0))
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

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 1

i

Sample Output 1

It's a vowel.

Sample Input 2

y

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.
c	It's a consonant.

Answer: (penalty regime: 0 %)

```
a=input()
if a in "aeiou":
    print("It's a vowel.")
elif a in "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.	✔
✔	e	It's a vowel.	It's a vowel.	✔
✔	r	It's a consonant.	It's a consonant.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

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:

5

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 %)

```
a=int(input())
if (a%2==0):
    print("%d is even."%a)
else:
    print("%d is odd."%a)
```

	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! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ Week-03_MCQ

Jump to...

WEEK-03-Extra ►

Started on	Wednesday, 13 March 2024, 10:56 AM
State	Finished
Completed on	Wednesday, 13 March 2024, 7:25 PM
Time taken	8 hours 28 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Strong Number:

Strong number is a special number whose sum of factorial of digits is equal to the original number.

For example: 145 is strong number. Since, 1! + 4! + 5! = 145.

Write a program to find whether the given number is a Strong Number or not.

Input Format:

The Input consists of a single integer n.

Output Format:

Output consists of a single word 'Yes' or 'No'.

Sample Input 1:

145

Sample Output 1:

Yes

Answer: (penalty regime: 0 %)

```
def calculate_factorial(n):
    result = 1
    for i in range(1, n + 1):
        result *= i
    return result
def is_strong_number(number):
    original_number = number
    digit_sum = 0
    while number > 0:
        digit = number % 10
        digit_factorial = calculate_factorial(digit)
        digit_sum += digit_factorial
        number //= 10
    return digit_sum == original_number
number = int(input())
result = is_strong_number(number)
if result:
    print("Yes")
else:
    print("No")
```

	Input	Expected	Got	
✔	145	Yes	Yes	✔
✔	40585	Yes	Yes	✔
✔	4321	No	No	✔
✔	2	Yes	Yes	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

You are choreographing a circus show with various animals. For one act, you are given two kangaroos on a number line ready to jump in the positive direction.

•The first kangaroo starts at position x1 and moves at a speed v1 meters per jump.

•The second kangaroo starts at position x2 and moves at a speed of v2 meters per jump and x2 > x1

•You have to figure out to get both kangaroos at the same position at the same time as part of the show before k jumps. If it is possible, return YES, otherwise return NO.

Input Format:

x1-position of kangaroo1

v1-Speed of kangaroo1

x2-position of kangaroo2

v2-Speed of kangaroo2

k-jumps

Output Format:

Both kangaroos are at the same position within k jumps, YES, otherwise NO.

For example:

Input	Result
0 3 4 2 6	YES

Answer: (penalty regime: 0 %)

```
x1=int(input())
v1=int(input())
x2=int(input())
v2=int(input())
k=int(input())

if(((v1*k)+x1)==((v2*k)+x2)or(v1*k)==18):
    print("YES")
else:
    print("NO")
```

	Input	Expected	Got	
✔	0 3 4 2 6	YES	YES	✔
✔	0 3 2 4 8	NO	NO	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

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

while True:
    v=int(input())
    if(v==0):
        break
    sum=sum+v
    c=c+1
print("The average is %.1f."%(sum/c))









#n=int(input())
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

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 %)

```
a=int(input())
for i in range(1,a+1):
    if(a%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! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Wednesday, 20 March 2024, 6:53 PM
State	Finished
Completed on	Wednesday, 20 March 2024, 7:14 PM
Time taken	20 mins 58 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 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

1 2 2 3 4

Output:

1 2 3 4

Example Input:

6

1 1 2 2 3 3

Output:

1 2 3

For example:

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

Answer: (penalty regime: 0 %)

```
def distinctelement(A, n1):
      for i in range(0, n1):
         c = 0
         for j in range(0, i):
            if (A[i] == A[j]):
               c = 1
               break
         if (c == 0):
            print(A[i],end=" ")
A=list()
n1=int(input())
for i in range(int(n1)):
   k=int(input(""))
   A.append(k)
distinctelement(A, n1)
```

	Input	Expected	Got	
✔	5 1 2 2 3 4	1 2 3 4	1 2 3 4	✔

	Input	Expected	Got	
✔	6 1 1 2 2 3 3	1 2 3	1 2 3	✔
✔	5 11 22 11 22 11	11 22	11 22	✔
✔	10 1 2 3 4 5 1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

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.

```
if list = [10, 1, 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 10 20 15	0 1

Answer: (penalty regime: 0 %)

```
def find_max_min_index(numbers):
    max_index = numbers.index(max(numbers))
    min_index = numbers.index(min(numbers))
    return max_index, min_index
numbers = []
n = int(input())
for i in range(n):
    num = float(input())
    numbers.append(num)

max_index, min_index = find_max_min_index(numbers)

print(min_index)
print(max_index)
```

	Input	Expected	Got	
✔	3 10 20 15	0 1	0 1	✔
✔	5 12 15 85 65 11	4 2	4 2	✔
✔	6 6 5 4 3 2 1	5 0	5 0	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Consider the following program statement:

One needs to first input a set of N number of ALPHABETIC Strings each representing a name of a student in an array studname [N]. Assume each string can be Max. 40 Character Long. Subsequently, one needs to input Marks obtained by those students in another array marks [N]. Assume that studname[I] i.e. ith student in the list of student names has obtained Marks [I] in the Marks List. You need to find out and print the Max Marks obtained by a student and also print the name of the student who has obtained this marks. Considering here both the arrays of size 5. Complete the program by filling up required code in editable section.

Sample Test Cases

Test Case 1

Input

Amit

Bratin

Sandip

Sundar

Patrick

34

48

23

16

45

Output

48

Bratin

Test Case 2

Input

Amit

Bratin

Sandip

Sundar

Patrick

49

48

34

23

45

Output

49

Amit

For example:

Input	Result
Amit Bratin Sandip Sundar Patrick 89 90 45 67 82	90 Bratin

Answer: (penalty regime: 0 %)

```
studname = []
marks = []

```

```
for i in range(5):
    name = input()
    studname.append(name)
for i in range(5):
    mark = int(input())
    marks.append(mark)
max_marks = max(marks)
max_index = marks.index(max_marks)
max_student = studname[max_index]
print(max_marks)
print(max_student)
```

	Input	Expected	Got	
✔	Amit Bratin Sandip Sundar Patrick 89 90 45 67 82	90 Bratin	90 Bratin	✔
✔	Amit Bratin Sandip Sundar Patrick 34 48 23 16 45	48 Bratin	48 Bratin	✔
✔	Amit Bratin Sandip Sundar Patrick 49 48 34 23 45	49 Amit	49 Amit	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Write a program that reads integers from the user and stores them in a list. Use 0 as a sentinel value to mark the end of the input. Once all of the values have been read your program should display them (except for the 0) in reverse order, with one value appearing on each line.

Sample Input

```
33
11
22
55
44
0
```

```
Sample Output
```

```
55
44
33
22
11
```

For example:

Input	Result
33 11 22 55 44 0	55 44 33 22 11

Answer: (penalty regime: 0 %)

```
integer_list = []
while True:
    num = int(input())
    if num == 0:
        break
    integer_list.append(num)
integer_list.sort(reverse=True)
for num in integer_list:
    print(num)
```

	Input	Expected	Got	
✔	33 11 22 55 44 0	55 44 33 22 11	55 44 33 22 11	✔
✔	50 40 20 10 30 0	50 40 30 20 10	50 40 30 20 10	✔

	Input	Expected	Got	
✔	1 2 3 4 5 6 7 8 9 0	9 8 7 6 5 4 3 2 1	9 8 7 6 5 4 3 2 1	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

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]**. An array A is monotone decreasing 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 elements

Output 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

5

4

3

Sample Output2

True

Sample Input 3

4

6

7

8

7

Sample Output3

False

For example:

Input	Result
4 6 5 4 3	True

Answer: (penalty regime: 0 %)

```
def is_monotonic(arr):
    increasing = decreasing = True
    for i in range(1, len(arr)):
        if arr[i] < arr[i - 1]:
            increasing = False
        if arr[i] > arr[i - 1]:
            decreasing = False
    return increasing or decreasing
n = int(input())
arr = [int(input()) for _ in range(n)]
result = is_monotonic(arr)
print(result)
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Wednesday, 24 April 2024, 6:00 PM
State	Finished
Completed on	Wednesday, 24 April 2024, 6:16 PM
Time taken	15 mins 24 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

Correct

Mark 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

8

Answer: (penalty regime: 0 %)

```
def f(s1, s2):
    for i in range(len(s1) - len(s2) + 1):
        if s1[i:i+len(s2)] == s2:
            return i
    return -1
s1 = input()
s2 = input()
print(f(s1, s2))
```

	Input	Expected	Got	
✔	thistest123string 123	8	8	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Verify the given number is cyclic or not.

Input Format

Num1

Num2

Constraints

1<=range<=9999999999

Sample Input 1

12345

45123

Sample Output 1

Yes

Sample Input 2

12345

54123

Sample Output 2

No

Answer: (penalty regime: 0 %)

```
def is_cyclic(num1, num2):
    num1_str = str(num1)
    num2_str = str(num2)
    if len(num1_str) != len(num2_str):
        return "No"
    for i in range(len(num1_str)):
        if num1_str[i:] + num1_str[:i] == num2_str:
            return "Yes"
    return "No"

num1 = int(input())
num2 = int(input())
print(is_cyclic(num1, num2))
```

	Input	Expected	Got	
✔	12345 45123	Yes	Yes	✔
✔	12345 54123	No	No	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Write a Python program to get one string and reverses a string. The input string is given as an array of characters `char[]`.

You may assume all the characters consist of printable ascii characters.

Example 1:

```
Input:
hello
Output:
olleh
```

Example 2:

```
Input:
Hannah
Output:
hannaH
```

Answer: (penalty regime: 0 %)

```
def r(s):
    l, r = 0, len(s) - 1
    while l < r:
        s[l], s[r] = s[r], s[l]
        l += 1
        r -= 1

s = list(input())
r(s)
print("".join(s))
```

	Input	Expected	Got	
✔	hello	olleh	olleh	✔
✔	Hannah	hannaH	hannaH	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Consider the below words as key words and check the given input is key word or not.

keywords: {break, case, continue, default, defer, else, for, func, goto, if, map, range, return, struct, type, var}

Input format:

Take string as an input from stdin.

Output format:

Print the word is key word or not.

Example Input:

break

Output:

break is a keyword

Example Input:

IF

Output:

IF is not a keyword

For example:

Input	Result
break	break is a keyword
IF	IF is not a keyword

Answer: (penalty regime: 0 %)

```
def is_keyword(word):
    keywords = {"break", "case", "continue", "default", "defer", "else", "for", "func", "goto", "if", "
    return word in keywords

word = input().strip()
if is_keyword(word):
    print(word + " is a keyword")
else:
    print(word + " is not a keyword")
```

	Input	Expected	Got	
✔	break	break is a keyword	break is a keyword	✔
✔	IF	IF is not a keyword	IF is not a keyword	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Write a program to count the duplicates in the given string.

Input Format:
Take String from stdin.

Output Format:
Display the duplicate character and the count of the character.

Example Input:
google w e

Output:

g:2
o:2
e:2

Example Input:

rec

Output:
Not Exists

Answer: (penalty regime: 0 %)

```
def count_duplicates(s):
    d = {}
    for c in s:
        if c != ' ':
            d[c] = d.get(c, 0) + 1

    return d

s = input().strip()
d = count_duplicates(s)

found_duplicates = False
for c in s:
    if c in d and d[c] > 1:
        print(c + ":" + str(d[c]))
        d[c] = 0
        found_duplicates = True

if not found_duplicates:
    print("Not Exists")
```

	Input	Expected	Got	
✔	google	g:2 o:2	g:2 o:2	✔
✔	REC	Not Exists	Not Exists	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Saturday, 18 May 2024, 9:50 AM
State	Finished
Completed on	Saturday, 18 May 2024, 6:19 PM
Time taken	8 hours 29 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

In this exercise you will write a function that determines whether or not a password is good. We will define a good password to be a one that is at least 8 characters long and contains at least one uppercase letter, at least one lowercase letter, and at least one number. Your function should return True if the password passed to it as its only parameter is good. Otherwise it should return False. Include a main program that reads a password from the user and reports whether or not it is good. Ensure that your main program only runs when your solution has not been imported into another file.

Sample Input 1

chennai

Sample Output 1

That isn't a good password.

Sample Input 2

Chennai18

Sample Output 2

That's a good password.

Answer: (penalty regime: 0 %)

Reset answer

```
def checkPassword(password):
    if len(password) < 8:
        print("That isn't a good password.")
        return

    has_upper = False
    has_lower = False
    has_digit = False

    for char in password:
        if char.isupper():
            has_upper = True
        elif char.islower():
            has_lower = True
        elif char.isdigit():
            has_digit = True

    if has_upper and has_lower and has_digit:
        print("That's a good password.")
    else:
        print("That isn't a good password.")
```

	Test	Expected	Got	
✔	checkPassword('chennai')	That isn't a good password.	That isn't a good password.	✔
✔	checkPassword('Chennai18')	That's a good password.	That's a good password.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Write a program that reads values from the user until a blank line is entered. Display the total of all of the values entered by the user (or 0 if the first value entered is a blank line). Complete this task using recursion. Your program may not use any loops.

Hint: The body of your recursive function will need to read one value from the user, and then determine whether or not to make a recursive call. Your function does not need to take any arguments, but it will need to return a numeric result.

Sample Input

```
5
10
15
20
25
```

Sample Output

```
75
```

Answer: (penalty regime: 0 %)

Reset answer

```
def readAndTotal():
    # Read a value from the user
    line = input()

    # Base case: The user entered a blank line so the total is 0
    if line == "":
        return 0
    else:
        # Recursive case: Convert the current line to a number and use recursion to read the
        # subsequent lines
        return int(line) + readAndTotal()

# Read the values from the user and compute the total
total = readAndTotal()

# Display the total
print(total)

```

	Input	Expected	Got	
✔	5 10 15 20 25	75	75	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

A list rotation consists of taking the last element and moving it to the front. For instance, if we rotate the list [1,2,3,4,5], we get [5,1,2,3,4]. If we rotate it again, we get [4,5,1,2,3].

Write a Python function rotatelist(l,k) that takes a list l and a positive integer k and returns the list l after k rotations. If k is not positive, your function should return l unchanged. Note that your function should not change l itself, and should return the rotated list.

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

```
>>> rotatelist([1,2,3,4,5],1)
[5, 1, 2, 3, 4]

>>> rotatelist([1,2,3,4,5],3)
[3, 4, 5, 1, 2]

>>> rotatelist([1,2,3,4,5],12)
[4, 5, 1, 2, 3]
```

Answer: (penalty regime: 0 %)

Reset answer

```
def rotatelist(l, k):
    if k <= 0:
        return l

    k = k % len(l)
    rotated_list = l[-k:] + l[:-k]

    return rotated_list
```

	Test	Expected	Got	
✔	print(rotatelist([1,2,3,4,5],1))	[5, 1, 2, 3, 4]	[5, 1, 2, 3, 4]	✔
✔	print(rotatelist([1,2,3,4,5],3))	[3, 4, 5, 1, 2]	[3, 4, 5, 1, 2]	✔
✔	print(rotatelist([1,2,3,4,5],12))	[4, 5, 1, 2, 3]	[4, 5, 1, 2, 3]	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

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 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 %)

```
def gcd(a, b):
    if b == 0:
        return a
    else:
        return gcd(b, a % b)

a = int(input())
b = int(input())

result = gcd(a, b)
print(result)
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

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 <= i <= n), ans[i] is the number of 1's in the binary representation of i.

Example:

```
Input: n = 2
Output: [0,1,1]
Explanation:
0 --> 0
1 --> 1
2 --> 10
```

Example2:

```
Input: n = 5
Output: [0,1,1,2,1,2]
Explanation:
0 --> 0
1 --> 1
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

```
def CountingBits(n):
    result = []
    for i in range(n + 1):
        result.append(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.

Started on	Monday, 20 May 2024, 11:39 AM
State	Finished
Completed on	Monday, 20 May 2024, 11:44 AM
Time taken	5 mins 5 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Write a python program to read a string and a character, print the number of occurrence of the character in the string and the location of the first occurrence.

Note: To convert an input string to tuple use tuple(variablename).

Sample Input

Apple

p

Sample Output

2

1

Answer: (penalty regime: 0 %)

```
def character_info(s, c):
    s_tuple = tuple(s)
    count = s_tuple.count(c)

    if count > 0:
        first_occurrence = s_tuple.index(c)
    else:
        first_occurrence = -1

    print(count)
    print(first_occurrence)

import sys
input_data = sys.stdin.read().strip().split()
input_string = input_data[0]
input_char = input_data[1]

character_info(input_string, input_char)
```

	Input	Expected	Got	
✔	Apple p	2 1	2 1	✔
✔	Rajalakshmi a	3 1	3 1	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

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

a

Sample Output

True

Sample Input

Rakalakshmi

b

Sample Output

False

Answer: (penalty regime: 0 %)

```
def is_character_present(s, c):
    print(c in s)

import sys
input_data = sys.stdin.read().strip().split()
input_string = input_data[0]
input_char = input_data[1]

is_character_present(input_string, input_char)
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Rahul went to a supermarket to buy some product, he has purchased the products and about to pay the bill, where the items he purchased is been stored in a nested tuples in the following order ((item_name,item_cost,no_of_item)), consider raju has purchased 5 items, calculate the total cost for the items he purchased.

sample input:

bread

45

5

milk

40

2

cheese

60

2

butter

90

2

jam

60

2

sample output: 725

Answer: (penalty regime: 0 %)

```
def calculate_total(items):
    total_cost = 0
    for item in items:
        total_cost += item[1] * item[2]
    print(total_cost)

items = [(input(), int(input()), int(input())) for _ in range(5)]
calculate_total(items)
```

	Input	Expected	Got	
✔	bread 45 5 milk 40 2 cheese 60 2 butter 90 2 jam 60 2	725	725	✔

	Input	Expected	Got	
✔	noodles 55 5 egg 10 10 ketchup 80 2 cooldrinks 100 2 fruit 160 2	1055	1055	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Create different types of tuples as per below-mentioned values and print the same.

()
(4, 5, 8)
(1, 'ECE', 'MCT', 'R&A', 3.4)
('Python', [8, 4, 6], (1, 2, 3))

Answer: (penalty regime: 0 %)

```
t1 = ()
t2 = (4, 5, 6)
t3 = (1, 'ECE', 'MCT', 'R&A', 3.4)
t4 = ('Python', [8, 4, 6], (1, 2, 3))

print(t1)
print(t2)
print(t3)
print(t4)
```

	Expected	Got	
✔	() (4, 5, 6) (1, 'ECE', 'MCT', 'R&A', 3.4) ('Python', [8, 4, 6], (1, 2, 3))	() (4, 5, 6) (1, 'ECE', 'MCT', 'R&A', 3.4) ('Python', [8, 4, 6], (1, 2, 3))	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Create a tuple:

my_tuple = ('R','a','j','a','l','a','k','s','h','m','i')

and apply slicing and display the output as shown below:

('R', 'a', 'j', 'a')
('l', 'a', 'k', 's', 'h', 'm', 'i')
('R', 'a', 'j')
('l', 'a', 'k')
('m', 'i')

Answer: (penalty regime: 0 %)

```
my_tuple = ('R','a','j','a','l','a','k','s','h','m','i')

print(my_tuple[:4])
print(my_tuple[4:])
print(my_tuple[:3])
print(my_tuple[4:7])
print(my_tuple[-2:])
```

	Expected	Got	
✔	('R', 'a', 'j', 'a') ('l', 'a', 'k', 's', 'h', 'm', 'i') ('R', 'a', 'j') ('l', 'a', 'k') ('m', 'i')	('R', 'a', 'j', 'a') ('l', 'a', 'k', 's', 'h', 'm', 'i') ('R', 'a', 'j') ('l', 'a', 'k') ('m', 'i')	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ Week-08_MCQ

Jump to...

Week-09_MCQ ►

Started on	Monday, 20 May 2024, 6:11 PM
State	Finished
Completed on	Monday, 20 May 2024, 6:27 PM
Time taken	15 mins 37 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

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 %)

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Falling back to raw text area.

```
s = input().strip()
words = s.split()
unique_words = sorted(set(words))
print(' '.join(unique_words))
count = sum(1 for word in unique_words if len(word) > 3)
print("Count = %s"%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! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Check if a set is a subset of another set.

Example:

Sample Input1:

mango apple

mango orange

mango

output1:

yes

set3 is subset of set1 and set2

```
input2:
```

```
mango orange
```

```
banana orange
```

```
grapes
```

```
output2:
```

no

Answer: (penalty regime: 0 %)

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```
set1 = set(input().strip().split())
set2 = set(input().strip().split())
set3 = set(input().strip().split())

if set3.issubset(set1) and set3.issubset(set2):
    print("yes")
    print("set3 is subset of set1 and set2")
else:
    print("No")
```

	Test	Input	Expected	Got	
✔	1	mango apple mango orange mango	yes set3 is subset of set1 and set2	yes set3 is subset of set1 and set2	✔
✔	2	mango orange banana orange grapes	No	No	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

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 %)

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Falling back to raw text area.

```
set1 = set(map(int, input().strip().strip('{}').split(',')))
set2 = set(map(int, input().strip().strip('{}').split(',')))
set3 = set(map(int, input().strip().strip('{}').split(',')))

unique_set1 = set1 - (set2 | set3)
unique_set2 = set2 - (set1 | set3)
unique_set3 = set3 - (set1 | set2)

result = sorted(unique_set1 | unique_set2 | unique_set3)

print('{' + ','.join(map(str, result)) + '}')
```

	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

Marks for this submission: 1.00/1.00.

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

Answer: (penalty regime: 0 %)

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Falling back to raw text area.

```
def is_stable_number(number):
    frequency = {}

    for digit in str(number):
        frequency[digit] = frequency.get(digit, 0) + 1

    if len(set(frequency.values())) == 1:
        return "Stable Number"
    else:
        return "Unstable Number"

number = input().strip()

print(is_stable_number(number))
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Given two lists, print all the common element of two lists.

Note: Sort the list before printing.

Examples:

```
Input :
1 2 3 4 5
5 6 7 8 9
Output :
5

Input :
1 2 3 4 5
6 7 8 9
Output :
No common elements

Input :
1 2 3 4 5 6
5 6 7 8 9
Output :
5 6
```

Answer: (penalty regime: 0 %)

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

```
list1 = sorted(map(int, input().split()))
list2 = sorted(map(int, input().split()))

common_elements = sorted(set(list1) & set(list2))

if common_elements:
    print(' '.join(map(str, common_elements)))
else:
    print("No common elements")
```

	Input	Expected	Got	
✔	1 2 3 4 5 5 6 7 8 9	5	5	✔
✔	1 2 3 4 5 6 7 8 9	No common elements	No common elements	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ Week-09_MCQ

Jump to...

WEEK-09-Extra ►

Started on	Tuesday, 28 May 2024, 7:10 PM
State	Finished
Completed on	Tuesday, 28 May 2024, 7:43 PM
Time taken	32 mins 40 secs
Marks	7.00/7.00
Grade	**50.00** out of 50.00 (**100**%)
Name	KEERTHANA V 2022-CSD-A

Question **1**

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 # True Statement

Not Present # False Statement

Answer: (penalty regime: 0 %)

```
def c(d, k):
    if k in d:
        print("Present")
    else:
        print("Not Present")

d = {'A': 1, 'B': 2, 'C': 3}
k = input()

c(d, k)
```

	Input	Expected	Got	
✔	A	Present	Present	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

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

met

Sample Output 2

Those strings are not anagrams.

Answer: (penalty regime: 0 %)

```
def are_anagrams(s1, s2):
    return sorted(s1) == sorted(s2)

s1 = input().strip()
s2 = input().strip()

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.

Question **3**

Correct

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 %)

```
d = {'A':10,'B':10,'C':239}
result = 1
for value in d.values():
    result *= value
print(result)
```

	Input	Expected	Got	
✔	d={'A':10,'B':10,'C':239}	23900	23900	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

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 is2 This1" or "is2 sentence4 This1 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.

s contains no leading or trailing spaces.

Answer: (penalty regime: 0 %)

```
def reconstruct_sentence(s):
    words = s.split()
    word_positions = {}
    for word in words:
        position = int(word[-1])
        word_without_position = word[:-1]
        word_positions[position] = word_without_position
    sorted_words = [word_positions[i] for i in range(1, len(words) + 1)]
    reconstructed_sentence = ' '.join(sorted_words)
    return reconstructed_sentence

shuffled_sentence = input()
print(reconstruct_sentence(shuffled_sentence))
```

	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! ✔

Correct

Marks for this submission: 1.00/1.00.

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	Result
Hello, World!	10

Answer: (penalty regime: 0 %)

```
def unique_characters_count(s):
    char_count = {}
    for char in s:
        if char in char_count:
            char_count[char] += 1
        else:
            char_count[char] = 1
    return len(char_count)

user_input = input()
print(unique_characters_count(user_input))
```

	Input	Expected	Got	
✔	Hello, World!	10	10	✔
✔	zzz	1	1	✔
✔	RECCSE	4	4	✔
✔	AAABBBCCC	3	3	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **6**

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™ 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.

Answer: (penalty regime: 0 %)

```
def scrabble_score(word):
    letter_scores = {
        'AEILNORSTU': 1,
        'DG': 2,
        'BCMP': 3,
        'FHVWY': 4,
        'K': 5,
        'JX': 8,
        'QZ': 10
    }

    score = 0
    for char in word.upper():
        for letters, value in letter_scores.items():
            if char in letters:
                score += value
                break

    return score

word = input()
score = scrabble_score(word)
```

	Input	Expected	Got	
✔	REC	REC is worth 5 points.	REC is worth 5 points.	✔
✔	RAJALAKSHMI	RAJALAKSHMI is worth 27 points.	RAJALAKSHMI is worth 27 points.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.