INTRODUCTION TO PYTHON VARIABLES , DATATYPES , INPUT/OUTPUT FORMATTING

Started on	Wednesday, 28 February 2024, 10:22 AM
State	Finished
Completed on	Wednesday, 28 February 2024, 11:37 AM
Time taken	1 hour 15 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

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

	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 **2**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

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

	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 **3**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

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

	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 **4**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
1 import math
2 a=float(input())
3 result=math.sqrt(a)
4 print("%.3f"%(result))
```

	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

Flag question

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 %)

```
a=int(input())
b=float(input())
print(a,type(a),sep=",")
print("%.1f"%(b),type(b),sep=",")

```

	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.

OPERATORS IN PYTHON

Started on	Wednesday, 28 February 2024, 5:31 PM
State	Finished
Completed on	Wednesday, 28 February 2024, 7:30 PM
Time taken	1 hour 58 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Pretend that you have just opened a new savings account that earns 4 percent interest per year. The interest that you earn is paid at the end of the year, and is added to the balance of the savings account. Write a program that begins by reading the amount of money deposited into the account from the user. Then your program should compute and display the amount in the savings account after 1, 2, and 3 years. Display each amount so that it is rounded to 2 decimal places.

Sample Input:

10000

Sample Output:

Balance as of end of Year 1: $10400.00.

Balance as of end of Year 2: $10816.00.

Balance as of end of Year 3: $11248.64.

Answer: (penalty regime: 0 %)

```
a=int(input())
first=a*(4/100+1)
second=first*(4/100+1)
third=second*(4/100+1)
print("Balance as of end of Year 1: $%.2f."%(first))
print("Balance as of end of Year 2: $%.2f."%(second))
print("Balance as of end of Year 3: $%.2f."%(third))
```

	Input	Expected	Got	
✔	10000	Balance as of end of Year 1: $10400.00. Balance as of end of Year 2: $10816.00. Balance as of end of Year 3: $11248.64.	Balance as of end of Year 1: $10400.00. Balance as of end of Year 2: $10816.00. Balance as of end of Year 3: $11248.64.	✔
✔	20000	Balance as of end of Year 1: $20800.00. Balance as of end of Year 2: $21632.00. Balance as of end of Year 3: $22497.28.	Balance as of end of Year 1: $20800.00. Balance as of end of Year 2: $21632.00. Balance as of end of Year 3: $22497.28.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
def isBuy(a,n):
    if a%n==0:
        print("True",end=" ")
    else:
        print("False",end=" ")
        return
N=int(input())
P1=int(input())
P2=int(input())
P3=int(input())
P4=int(input())
isBuy(P1,N)
isBuy(P2,N)
isBuy(P3,N)
isBuy(P4,N)
```

	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 **3**

Correct

Mark 1.00 out of 1.00

Flag question

Write a python program that takes a integer between 0 and 15 as input and displays the number of '1' s in its binary form.(Hint:use python bitwise operator.

Sample Input

3

Sample Output:

2

Explanation:

The binary representation of 3 is 011, hence there are 2 ones in it. so the output is 2.

Answer: (penalty regime: 0 %)

```
a=int(input())
if a>=0 and a<=15:
    val=bin(a).replace("0b"," ").count("1")
print(val)
```

	Input	Expected	Got	
✔	3	2	2	✔
✔	5	2	2	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
weapons=int(input())
solider_count=int(input())
if weapons%3==0 and solider_count%2==0:
    print("True")
else:
    print("False")
```

	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 **5**

Correct

Mark 1.00 out of 1.00

Flag question

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())
if a==0:
    print("C")
else:
    print("D")
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

SELECTION STRUCTURES IN PYTHON

Started on	Tuesday, 5 March 2024, 6:17 AM
State	Finished
Completed on	Tuesday, 5 March 2024, 8:57 AM
Time taken	2 hours 39 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Most years have 365 days. However, the time required for the Earth to orbit the Sun is actually slightly more than that. As a result, an extra day, February 29, is included in some years to correct for this difference. Such years are referred to as leap years. The rules for determining whether or not a year is a leap year follow:

• Any year that is divisible by 400 is a leap year.

• Of the remaining years, any year that is divisible by 100 is not a leap year.

• Of the remaining years, any year that is divisible by 4 is a leap year.

• All other years are not leap years.

Write a program that reads a year from the user and displays a message indicating whether or not it is a leap year.

Sample Input 1

1900

Sample Output 1

1900 is not a leap year.

Sample Input 2

2000

Sample Output 2

2000 is a leap year.

Answer: (penalty regime: 0 %)

```
year=int(input())
if year%100==0 and year%4!=0 or year%400!=0:
    print((year),"is not a leap year.")
else:
    print((year),"is a leap year.")
```

	Input	Expected	Got	
✔	1900	1900 is not a leap year.	1900 is not a leap year.	✔
✔	2000	2000 is a leap year.	2000 is a leap year.	✔
✔	2100	2100 is not a leap year.	2100 is not a leap year.	✔
✔	2400	2400 is a leap year.	2400 is a leap year.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

The length of a month varies from 28 to 31 days. In this exercise you will create a program that reads the name of a month from the user as a string. Then your program should display the number of days in that month. Display "28 or 29 days" for February so that leap years are addressed.

Sample Input 1

February

Sample Output 1

February has 28 or 29 days in it.

Sample Input 2

March

Sample Output 2

March has 31 days in it.

Sample Input 3

April

Sample Output 3

April has 30 days in it.

For example:

Input	Result
February	February has 28 or 29 days in it.

Answer: (penalty regime: 0 %)

```
month=str(input())
if month=="April" or month=="June" or month=="September" or month=="November":
    print((month),"has 30 days in it.")
elif month=="February":
    print((month),"has 28 or 29 days in it.")
else:
    print((month),"has 31 days in it.")
```

	Input	Expected	Got	
✔	February	February has 28 or 29 days in it.	February has 28 or 29 days in it.	✔
✔	March	March has 31 days in it.	March has 31 days in it.	✔
✔	April	April has 30 days in it.	April has 30 days in it.	✔
✔	May	May has 31 days in it.	May has 31 days in it.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

Write a program to calculate and print the Electricity bill where the unit consumed by the user is given from test case. It prints the total amount the customer has to pay. The charge are as follows:

Unit	Charge / Unit
Upto 199	@1.20
200 and above but less than 400	@1.50
400 and above but less than 600	@1.80
600 and above	@2.00

If bill exceeds Rs.400 then a surcharge of 15% will be charged and the minimum bill should be of Rs.100/-

Sample Test Cases

Test Case 1

Input

50

Output

100.00

Test Case 2

Input

300

Output

517.50

For example:

Input	Result
100.00	120.00

Answer: (penalty regime: 0 %)

```
unit=float(input())
surcharge=0
if unit<200:
    charge=1.20
elif unit>=200 and unit<400:
    charge=1.50
elif unit >=400 and unit<600:
    charge=1.80
else:
    charge=2.00
result=unit*charge

if result > 300:
    surcharge=result*15/100.00
total_amt= result + surcharge
if total_amt < 100:
    total_amt=100.00
print("%.2f"%total_amt)
```

	Input	Expected	Got	
✔	50	100.00	100.00	✔
✔	100.00	120.00	120.00	✔
✔	500	1035.00	1035.00	✔
✔	700	1610.00	1610.00	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

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())
if a%3==0 and b%2==0:
    print("True")
else:
    print("False")
```

	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 **5**

Correct

Mark 1.00 out of 1.00

Flag question

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())
if a//2 <b:
    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.

ITERATION CONTROL STRUCTURES - LOOPING

Started on	Tuesday, 12 March 2024, 5:40 PM
State	Finished
Completed on	Tuesday, 12 March 2024, 6:23 PM
Time taken	43 mins 19 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Write a program to find the sum of the series 1 +11 + 111 + 1111 + . . . + n terms (n will be given as input from the user and sum will be the output)

Sample Test Cases

Test Case 1

Input

4

Output

1234

Explanation:

```
as input is 4, have to take 4 terms.

1 + 11 + 111 + 1111
```

Test Case 2

Input

6

Output

123456

For example:

Input	Result
3	123

Answer: (penalty regime: 0 %)

```
a=int(input())
sum=0
sum1=0
for i in range(0,a):
    sum=sum+10**i
    sum1+=sum
print(sum1)
```

	Input	Expected	Got	
✔	1	1	1	✔
✔	3	123	123	✔
✔	4	1234	1234	✔
✔	7	1234567	1234567	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

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())
speed1=int(input())
x2=int(input())
speed2=int(input())
k=int(input())
value=speed1*speed2
if value==k:
    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

Flag question

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 %)

```
num=int(input())
for i in range(1,num+1):
    if num%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.

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
num=int(input())
sum=0
for i in range(0,num+1):
    sum+=i
print("The sum of the first %d positive integers is %.1f"%(num,sum))
```

	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! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

Write a program to find the count of ALL digits in a given number N. The number will be passed to the program as an input of type int.

Assumption: The input number will be a positive integer number>= 1 and<= 25000.

For e.g.

If the given number is 292, the function should return 3 because there are 3 digits in this number

If the given number is 1015, the function should return 4 because there are 4 digits in this number

For example:

InputResult

292 3

1015 4

For example:

Input	Result
293	3

Answer: (penalty regime: 0 %)

```
num=int(input())
count=0
while num!=0:
    num//=10
    count=count+1
print(count)
```

	Input	Expected	Got	
✔	293	3	3	✔
✔	6788	4	4	✔
✔	52321	5	5	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

LISTS

Started on	Thursday, 14 March 2024, 4:53 PM
State	Finished
Completed on	Thursday, 14 March 2024, 6:55 PM
Time taken	2 hours 1 min
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Write a Python program that takes two lists and returns True if they have at least one common member.

First line of input contains List 1

Second line of input contains List 2

Output is True if there is atleast one common element, false if no common elements

For example:

Input	Result
10 20 30 40 50 12 25 85 40 21	True

Answer: (penalty regime: 0 %)

```
list1=input()
list2=input()
list_one=list1.split(" ")
list_two=list2.split(" ")
for i in range(len(list_one)):
    list_one[i]=int(list_one[i])
for i in range(len(list_two)):
    list_two[i]=int(list_two[i])
if set(list_one) & set(list_two):
    print("True")
else:
    print("False")
```

	Input	Expected	Got	
✔	10 20 30 40 50 12 25 85 40 21	True	True	✔
✔	1 2 3 4 5 7 8 9 10 11	False	False	✔
✔	10 20 30 20 20 30	True	True	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
n=int(input())
List=[]
for i in range(n):
    List.append(int(input()))
result=list(set(List))
for i in result:
    print(i,end=" ")

```

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

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

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

	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	✔
✔	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 **4**

Correct

Mark 1.00 out of 1.00

Flag question

You are given an array of N integers, A1, A2, . . . , AN and an integer K. Return the of count of distinct numbers in all windows of size K.

Input :

1 2 1 3 4 3

3

Output :

2

3

3

2

Explanation

All windows of size K are

[1, 2, 1]

[2, 1, 3]

[1, 3, 4]

[3, 4, 3]

Answer: (penalty regime: 0 %)

```
def count(win,k):
    c=len(set(win))
    return c
a=input()
k=int(input())
List=a.split(" ")
for i in range(len(List)):
    List[i]=int(List[i])
for i in range(len(List)-k+1):
    print(count(List[i:k+i],k))

```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
name=[]
mark=[]
for i in range(5):
   name.append(str(input()))
for i in range(5):
    mark.append(int(input()))
max_mark=max(mark)
student=name[mark.index(max_mark)]
print(max_mark)
print(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.

STRINGS

Started on	Wednesday, 3 April 2024, 10:33 AM
State	Finished
Completed on	Wednesday, 3 April 2024, 11:42 AM
Time taken	1 hour 8 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
key=[]
n=str(input())
key=['break','case','continue','default','defer','else','for','func','goto','if','map','range','return','struct
if n in key:
    print("%s is a keyword"%(n))
else:
    print("%s is not a keyword"%(n))
```

	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 **2**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
1 str1=str(input())
2 str2=str(input())
3 print(str1.find(str2))
```

	Input	Expected	Got	
✔	thistest123string 123	8	8	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

Write a code to reverse the case of a character input

Input Format:

Single character Input

Output Format:

Reversed character

Example Input:

R

Output:

r

Example Input:

a

Output:

A

For example:

Input	Result
R	r
a	A

Answer: (penalty regime: 0 %)

```
chara=input()
if chara.islower():
    print(chara.upper())
else:
    print(chara.lower())
```

	Input	Expected	Got	
✔	R	r	r	✔
✔	a	A	A	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
key=[]
n=str(input())
key=['break','case','continue','default','defer','else','for','func','goto','if','map','range','return','struct
if n in key:
    print("%s is a keyword"%(n))
else:
    print("%s is not a keyword"%(n))
```

	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

Flag question

String should contain only the words are not palindrome.

Sample Input 1

Malayalam is my mother tongue

Sample Output 1

is my mother tongue

Answer: (penalty regime: 0 %)

```
str1=input()
List=[]
List=str1.split(" ")
for i in List:
    n="".join(reversed(i))
    if n.lower()==i.lower():
        continue
    else:
        print(i,end=" ")

```

	Input	Expected	Got	
✔	Malayalam is my mother tongue	is my mother tongue	is my mother tongue	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

FUNCTIONS

Started on	Friday, 12 April 2024, 12:12 PM
State	Finished
Completed on	Friday, 12 April 2024, 6:23 PM
Time taken	6 hours 11 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

The notion of a palindrome was introduced previously. In this exercise you will write a recursive function that determines whether or not a string is a palindrome. The empty string is a palindrome, as is any string containing only one character. Any longer string is a palindrome if its first and last characters match, and if the string formed by removing the first and last characters is also a palindrome.

Write a program that reads a string from the user and uses your recursive function to determine whether or not it is a palindrome. Then your program should display an appropriate message for the user.

Sample Input

malayalam

Sample Output

That was a palindrome!

Sample Input

madan

Sample Output

That is not a palindrome.

Answer: (penalty regime: 0 %)

Reset answer

```
def isPalindrome(s):
    # Base case: The empty string is a palindrome. So is a string containing only 1 character.
    s1=''.join(reversed(s))
    if s1==s:
        return True
    return False


    # Recursive case: The string is a palindrome only if the first and last characters match, and
    # the rest of the string is a palindrome


# Check whether or not a string entered by the user is a palindrome
# Read the string from the user
# Check its status and display the result
line=input()
if isPalindrome(line):
    print("That was a palindrome!")
else:
    print("That is not a palindrome.")

```

	Input	Expected	Got	
✔	malayalam	That was a palindrome!	That was a palindrome!	✔
✔	madan	That is not a palindrome.	That is not a palindrome.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

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(input1):
    c=0
    c1=0
    c2=0
    for i in input1:
        if i.isupper():
            c+=1
        elif i.islower():
            c1+=1
        else:
            c2+=1
    if c>=1 and c1>=1 and c2>=1:
        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 **3**

Correct

Mark 1.00 out of 1.00

Flag question

Write a Python function sumofsquares(m) that takes an integer m returns True if m is a sum of squares and False otherwise. (If m is not positive, your function should return False.)

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

```
>>> sumofsquares(41)
True

>>> sumofsquares(30)
False

>>> sumofsquares(17)
True
```

Answer: (penalty regime: 0 %)

Reset answer

```
from math import *

def issquare(n):
    k = int(sqrt(n))
    print(k)
    return(k*k == n)

def sumofsquares(m):
    if m<0:
        return False
    for i in range(1,m):
        for j in range(1,m):
            n = i**2 + j**2
            if m == n:
                return True
            elif n > m:
                break
    return False
```

	Test	Expected	Got	
✔	print(sumofsquares(41))	True	True	✔
✔	print(sumofsquares(30))	False	False	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

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 the string 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

```
def wellbracketed(s):
    c=0
    for i in s:
        if i=='(':
            c+=1
        elif i==')':
            c+=1
        else:
            continue
    if c%2==0:
        return True
    else:
        return False
```

	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! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

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

TUPLE

Started on	Sunday, 28 April 2024, 7:11 PM
State	Finished
Completed on	Sunday, 28 April 2024, 8:14 PM
Time taken	1 hour 2 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Create a tuple, remove an item from the tuple, and display the tuple.

Sample input:

5 : No of items

2020 : tuple items

'd'

"rec"

'python'

'tuple'

python : item to be removed

Sample Output:

('2020','d,'rec','tuple')

For example:

Input	Result
4 samsung vivo redmi Vijay Vijay	('samsung', 'vivo', 'redmi')

Answer: (penalty regime: 0 %)

```
n=int(input())
List=[]
for i in range(n):
    List.append(input())
R=input()
List.remove(R)
print(str(List).replace('[','(').replace(']',')'))

```

	Input	Expected	Got	
✔	4 samsung vivo redmi Vijay Vijay	('samsung', 'vivo', 'redmi')	('samsung', 'vivo', 'redmi')	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

Create a 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 %)

```
1 my_tuple = ('R','a','j','a','l','a','k','s','h','m','i')
2 print(my_tuple[0:4])
3 print(my_tuple[4:len(my_tuple)])
4 print(my_tuple[0:3])
5 print(my_tuple[4:7])
6 print(my_tuple[9:len(my_tuple)])
7
8
```

	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.

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
1  t1=()
2  print(t1)
3  t2=(4, 5, 6)
4  print(t2)
5  t3=(1, 'ECE', 'MCT', 'R&A',  3.4)
6  print(t3)
7  t4=('Python', [8, 4, 6], (1, 2, 3))
8  print(t4)
9
10
```

	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 **4**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
n=int(input())
List1=['a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','w','x','y','z']
List=[]
for i in range(n):
    List.append(int(input()))
for i in range(len(List)):
    print("%s=%d"%(List1[i],List[i]))

```

	Input	Expected	Got	
✔	4 10 30 40 60	a=10 b=30 c=40 d=60	a=10 b=30 c=40 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 **5**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
1 string=input()
2 char=str(input())
3 print(string.count(char))
4 print(string.find(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.

SET

Started on	Wednesday, 24 April 2024, 11:37 AM
State	Finished
Completed on	Thursday, 25 April 2024, 5:20 PM
Time taken	1 day 5 hours
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Mr.Harish is maintaining a phone directory which stores phone numbers. He will update the directory with phone numbers every week. While entering the input the number should not be stored inside if the phone number already exists. Finally he want his phone number to be printed in ascending order

Input: n – A1 array size and m – A2 arraysize

Array A1 containing phone numbers already existing and Array A2 containing numbers to be inserted

Ouput : Phone numbers printed in ascending order

Sample Test Case

Input

5

6

9840403212 9890909012 98123455 90123456 99123456

90909090 99999999 9840403212 12345678 12347890 99123456

Output

12345678 12347890 90123456 90909090 98123455 99123456 99999999 9840403212 9890909012

Answer: (penalty regime: 0 %)

```
n=int(input())
m=int(input())
List1=list(map(int,input().split(" ")))
List2=list(map(int,input().split(" ")))
for i in List2:
    List1.append(i)
List1=list(set(List1))
List1.sort()
for i in List1:
    print(i,end=" ")

```

	Input	Expected
✔	3 3 9876543211 1122334455 6677889911 6677889911 9876543211 4455667788	1122334455 4455667788 6677889911 9876543211
✔	5 6 9840403212 9890909012 98123455 90123456 99123456 90909090 99999999 9840403212 12345678 12347890 99123456	12345678 12347890 90123456 90909090 98123455 99123456 99999999 9840403

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
List1=list(map(int,input().split(" ")))
List2=list(map(int,input().split(" ")))
List=list(set(List1) & set(List2))
if List:
    for i in List:
        print(i,end=" ")
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.

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

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

Example 1:

Input:

1 1 2

Output:

1 2

Example 2:

Input:

1 1 2 3 3

Output:

1 2 3

Answer: (penalty regime: 0 %)

```
List=list(map(int,input().split(" ")))
List=list(set(List))
List.sort()
for i in List:
    print(i,end=" ")
```

	Test	Input	Expected	Got	
✔	1	1 1 2	1 2	1 2	✔
✔	2	1 1 2 3 3	1 2 3	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

Flag question

You are given an array of N integers, A1, A2, . . . , AN and an integer K. Return the of count of distinct numbers in all windows of size K.

Input :

1 2 1 3 4 3

3

Output :

2

3

3

2

Explanation

All windows of size K are

[1, 2, 1]

[2, 1, 3]

[1, 3, 4]

[3, 4, 3]

Answer: (penalty regime: 0 %)

```
def window(win):
    return len(set(win))
List=list(map(int,input().split(" ")))
k=int(input())
for i in range(len(List)-k+1):
    print(window(List[i:k+i]))

```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

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 string denoting *a*.
The second line contains a string denoting *b*.

Constraints

- *1 ≤ length(a), length(b) ≤ 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 %)

```
str1=input().lower()
str2=input().lower()
if sorted(str1)==sorted(str2):
    print("Anagrams")
else:
    print("Not Anagrams")
```

	Input	Expected	Got	
✔	madam maDaM	Anagrams	Anagrams	✔
✔	DAD DAD	Anagrams	Anagrams	✔
✔	MAN MAM	Not Anagrams	Not Anagrams	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

DICTIONARY

Started on	Sunday, 28 April 2024, 5:01 PM
State	Finished
Completed on	Sunday, 28 April 2024, 7:10 PM
Time taken	2 hours 8 mins
Marks	7.00/7.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SATHIYA SRI D 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

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

Points Letters

1 A, E, I, L, N, O, R, S, T and U

2 D and G

3 B, C, M and P

4 F, H, V, W and Y

5 K

8 J and X

10 Q and Z

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

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

Sample Input

REC

Sample Output

REC is worth 5 points.

Answer: (penalty regime: 0 %)

```
score={'A':1,'E':1,'I':1,'L':1,'N':1,'O':1,'R':1,'S':1,'T':1,'U':1,'D':2,'G':2,'B':3,'C':3,'M':3,'P':3,'F':4,'H
string=input()
c=0
for j in string:
    c+=score[j]
print("%s is worth %d points."%(string,c))
```

	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.

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
string=input().split(" ")
words=[]
for i in range(len(string)):
     word=string[i]
     index=int(word[-1])
     words.insert(index-1,word[0:(len(word)-1)])
for i in words:
    print(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! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

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

01 87

02 99

03 45

04 77

Output:

77

02

03

Answer: (penalty regime: 0 %)

```
n=int(input())
dict={}
c=0
for i in range(n):
    key,value=input().split(" ")
    dict[value]=key
    c+=int(value)
print(c//len(dict))
print(dict[max(dict)])
print(dict[min(dict)])
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

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

if n in d.keys():
  print("Present")
else:
   print("Not Present")
```

	Input	Expected	Got	
✔	A	Present	Present	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

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}
c=1
for i in d.values():
    c*=i
print(c)

```

	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 **6**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
string=input()
List=set()
for i in string:
    List.add(i)
print(len(List))
```

	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 **7**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
s1=input()
s2=input()
if sorted(s1) == sorted(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.