RAJALAKSHMI ENGINEERING COLLEGE,THANDALAM

PROGRAMMING USING PYTHON

Name: C.Harshith **Register No: 230401051**

Week1_Coding

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State Finished

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Time taken 14 days 6 hours

Marks 4.00/6.00

Grade 66.67 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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'>

For example:

Input Result

10

10.9

10,<class 'int'>

10.9,<class 'float'>

Answer:(penalty regime: 0 %)

Feedback

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.

Question 2

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Ramesh’s basic salary is input through the keyboard. His dearness allowance is 40% of his basic salary, and his house rent allowance is 20% of his basic salary. Write a program to calculate his gross salary.

Sample Input:

10000

Sample Output:

16000

For example:

Input Result

10000

16000

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

10000

16000

16000.0

20000

32000

32000.0

28000

44800

44800.0

5000

8000

8000.0

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 3

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

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

14.00

3.742

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

8.00

2.828

2.828427

14.00

3.742

3.741657

4.00

2.000

2.000000

487

22.068

22.068076

Question 4

Question text

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

45500

500

60000

30.43 is the gain percent.

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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 %)

Feedback

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.

Question 6

Question text

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 %)

Feedback

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!

Week2_Coding:

Question 1

Write a program that returns the last digit of the given number. Last digit is being referred to the least significant digit i.e. the digit in the ones (units) place in the given number.

The last digit should be returned as a positive number.

For example,

if the given number is 197, the last digit is 7

if the given number is -197, the last digit is 7

For example:

Input Result

197

7

-197

Question 2

Question text

Note:

Don't use if-else. Operators alone must be used .

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

For example:

Input Result

18 40False

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

19

45

True

True

18

40

False

False

18

42

True

True

16

45

False

False

Question 3

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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.

For example:

Input Result

3

2

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

3

2

2

5

2

2

15

4

4

Question 4

Question text

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 %)

Feedback

Input Expected Got

32

43

False

False

273

7890

True

True

800

4590

False

False

6789

32996

True

True

Question 5

Question text

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

For example:

Input Result

5

25

23

20

10

True False True True

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

5

25

23

20

10

True False True True

True False True True

4

23

24

21

12

False True False True

False True False True

8

64

8

16

32

True True True True

True True True True

Question 6

Question text

The program that you create for this exercise will begin by reading the cost of a meal ordered at a restaurant from the user. Then your program will compute the tax and tip for the meal. Use your local tax rate (5 percent) when computing the amount of tax owing. Compute the tip as 18 percent of the meal amount (without the tax). The output from your program should include the tax amount, the tip amount, and the grand total for the meal including both the tax and the tip. Format the output so that all of the values are displayed using two decimal places.

Sample Input

100

Sample Output

The tax is 5.00 and the tip is 18.00, making the total 123.00

For example:

Input Result

100

The tax is 5.00 and the tip is 18.00, making the total 123.00

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

100

The tax is 5.00 and the tip is 18.00, making the total 123.00

The tax is 5.00 and the tip is 18.00, making the total 123.00

250

The tax is 12.50 and the tip is 45.00, making the total 307.50

The tax is 12.50 and the tip is 45.00, making the total 307.50

Question 7

Question textPretend 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.

For example:

Input Result

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.

Answer:(penalty regime: 0 %)

Feedback

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.

Question 8

Question text

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.

Input Expected Got

0

C

C

1

D

D

Question 9

Question text

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

IF Lokpaul wins print true, otherwise false.

Sample Input

10

Sample Output

True

Explanation:

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

For example:

Input Result

101

False

Input Expected Got

56

True

True

101

False

False

-1

False

False

Question 10

Question text

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.

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.

Week3_coding

Question 1

Question text

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

Feedback

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.

Correct

Question text

The Chinese zodiac assigns animals to years in a 12 year cycle. One 12 year cycle is shown in the table below. The pattern repeats from there, with 2012 being another year of the dragon, and 1999 being another year of the hare.

Year Animal

2000 Dragon

2001 Snake

2002 Horse

2003 Sheep

2004 Monkey

2005 Rooster

2006 Dog

2007 Pig

2008 Rat

2009 Ox

2010 Tiger

2011 Hare

Write a program that reads a year from the user and displays the animal associated with that year. Your program should work correctly for any year greater than or equal to zero, not just the ones listed in the table.

Sample Input 1

2010

Sample Output 1

2010 is the year of the Tiger.

Sample Input 2

2020

Sample Output 2

2020 is the year of the Rat.

Input Expected Got

2010

2010 is the year of the Tiger.

2010 is the year of the Tiger.

2020

2020 is the year of the Rat.

2020 is the year of the Rat

Question 3

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

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

500

1035.00

Question 4

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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.

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.

2020

2020 is a leap year.

2020 is a leap year.

Question 5

Question text

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.

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.

Question 6

Question text

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 %)

Feedback

Input Expected Got

8

3

OUT

OUT

8

5

IN

IN

20

9

OUT

OUT

50

31

IN

IN

Question 7

Question text

Three numbers form a Pythagorean triple if the sum of squares of two numbers is equal to the square of the third.

For example, 3, 5 and 4 form a Pythagorean triple, since 3*3 + 4*4 = 25 = 5*5

You are given three integers, a, b, and c. They need not be given in increasing order. If they form a Pythagorean triple, then print "yes", otherwise, print "no". Please note that the output message is in small letters.

Sample Input

3

5

4

Sample Output

yes

Sample Test Cases

Test Case 1

Input

3

5

4

Output

yes

Test Case 2

Input

5

8

2

Output

no

Feedback

Input Expected Got

3

5

4

yes

yes

5

8

2

no

no

Question 8

Question text

A triangle can be classified based on the lengths of its sides as equilateral, isosceles or scalene. All three sides of an equilateral triangle have the same length. An isosceles triangle has two sides that are the same length, and a third side that is a different length. If all of the sides have different lengths then the triangle is scalene.

Write a program that reads the lengths of the three sides of a triangle from the user. Then display a message that states the triangle's type.

Sample Input 1

60

60

60

Sample Output 1

That's a equilateral triangle

Sample Input 2

40

40

80

Sample Output 2

That's a isosceles triangle

Sample Input 3

50

60

70

Sample Output 3

That's a scalene triangle

For example:

Input Result

60

60

60

That's a equilateral triangle

40

40

80

That's a isosceles triangle

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

60

60

60

That's a equilateral triangle

That's a equilateral triangle

40

40

80

That's a isosceles triangle

That's a isosceles triangle

50

60

70

That's a scalene triangle

That's a scalene triangle

50

50

80

That's a isosceles triangle

That's a isosceles triangle

10

10

10

That's a equilateral triangle

That's a equilateral triang

Question 9

Question text

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

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

Question 10

Question text

Write a program that returns the second last digit of the given number. Second last digit is being referred 10the digit in the tens place in the given number.

For example, if the given number is 197, the second last digit is 9.

Note1 - The second last digit should be returned as a positive number. i.e. if the given number is -197, the second last digit is 9.

Note2 - If the given number is a single digit number, then the second last digit does not exist. In such cases, the program should return -1. i.e. if the given number is 5, the second last digit should be returned as -1

For example:

Input Result

197

9

5

-1

Feedback

Input Expected Got

197

9

9

-197

9

9

5

-1

-1

123456

5

5

8

-1

-1

Week4_Coding

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given an integer N, check whether N the given number can be made a perfect square after adding to it.

Input Format:

Single integer input.

Output Format:

Yes or No.

Example Input:

24

Output:

Yes

Example Input:

26

Output:

No

For example:

Input Result

24

Yes

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

24

Yes

Yes

26

No

No

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program that finds whether the given number N is Prime or not.

If the number is prime, the program should return 2 else it must return 1.

Assumption: 2 <= N <=5000, where N is the given number.

Example1: if the given number N is 7, the method must return 2

Example2: if the given number N is 10, the method must return 1

For example:

Input Result

7

2

10

1

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

7

2

2

10

1

1

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given a number N, find the next perfect square greater than N.

Input Format:

Integer input from stdin.

Output Format:

Perfect square greater than N.

Example Input:

10

Output:

16

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

10

16

16

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program to find the count of non-repeated 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.

Some examples are as below.

If the given number is 292, the program should return 1 because there is only 1 non--repeated digit '9' in this number

If the given number is 1015, the program should return 2 because there are 2 non-repeated digits in this number, '0', and '5'.

If the given number is 108, the program should return 3 because there are 3 non--repeated digits in this number, '1', '0', and '8'.

If the given number is 22, the function should return 0 because there are NO non--repeated digits in this number.

For example:

Input	Result
292	1
1015	2
108	3
22	0

Answer:(penalty regime: 0 %)

Feedback

Input	Expected	Got
292	1	1
1015	2	2
108	3	3
22	0	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

Question text

In mathematics, the factorial of a non-negative integer n, denoted by n!, is the product of all positive integers less than or equal to n. For example,

5! = 5 x 4 x 3 x 2 x 1 = 120

4! = 4 x 3 x 2 x 1 = 24

9! = 9 x 8 x 7 x 6 x 5 x 4 x 3 x 2 x 1 = 362880

Write a program to find the factorial of a given number.

The given number will be passed to the program as an input of type int.

The program is expected to calculate the factorial of the given number and return it as an int type.

Assumptions for this program:

The given input number will always be greater than or equal to 1.

Due to the range supported by int. the input numbers will range from 1 to 12.

For example:

Input Result

5

120

4

24

9

362880

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

5

120

120

4

24

24

9

362880

362880

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 6

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given a positive integer N, check whether it can be represented as a product of single digit numbers.

Input Format:

Single Integer input.

Output Format:

Output displays Yes if condition satisfies else prints No.

Example Input:

14

Output:

Yes

Example Input:

13

Output:

No

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

14

Yes

Yes

13

No

No

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 7

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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

Test Case 2

Input

6

Output

123456

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

4

1234

1234

6

123456

123456

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program to return the nth number in the fibonacci series.

The value of N will be passed to the program as input.

NOTE: Fibonacci series looks like –

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, . . . and so on.

i.e. Fibonacci series starts with 0 and 1, and continues generating the next number as the sum of the previous two numbers.

• first Fibonacci number is 0,

• second Fibonacci number is 1,

• third Fibonacci number is 1,

• fourth Fibonacci number is 2,

• fifth Fibonacci number is 3,

• sixth Fibonacci number is 5,

• seventh Fibonacci number is 8, and so on.

For example:

Input Result

1

0

4

2

7

8

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

1

0

0

4

2

2

7

8

8

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 9

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program to find the count of unique 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 program should return 2 because there are only 2 unique digits '2' and '9' in this number

If the given number is 1015, the program should return 3 because there are 3 unique digits in this number, '1', '0', and '5'.

For example:

Input	Result
292	2
1015	3

Answer:(penalty regime: 0 %)

Feedback

Input	Expected	Got
292	2	2
1015		

3

3

123

3

3

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

Flag question

Question text

A Number is said to be Disarium number when the sum of its digit raised to the power of their respective positions becomes equal to the number itself. Write a program to print number is Disarium or not.

Input Format:

Single Integer Input from stdin.

Output Format:

Yes or No.

Example Input:

175

Output:

Yes

Explanation

1^1 + 7^2 +5^3 = 175

Example Input:

123

Output:

No

For example:

Input Result

175

Yes

123

No

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

175

Yes

Yes

123

No

No

Passed all tests!

Week5_Coding

Question 1

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

Given a string S which is of the format USERNAME@DOMAIN.EXTENSION, the program must print the EXTENSION, DOMAIN, USERNAME in the reverse order.

Input Format:

The first line contains S.

Output Format:

The first line contains EXTENSION.

The second line contains DOMAIN.

The third line contains USERNAME.

Boundary Condition:

1 <= Length of S <= 100

Example Input/Output 1:

Input:

abcd@gmail.com

Output:

com

gmail

abcd

For example:

Input Result

arvijayakumar@rajalakshmi.edu.in

edu.in

rajalakshmi

arvijayakumar

Answer:(penalty regime: 0 %)

Question 2

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

Reverse a string without affecting special characters

Given a string S, containing special characters and all the alphabets, reverse the string without affecting the positions of the special characters.

Input:

A&B

Output:

B&A

Explanation: As we ignore '&' and

As we ignore '&' and then reverse, so answer is "B&A".

For example:

Input	Result
A&x#	
x&A#	

Answer:(penalty regime: 0 %)

Question 3

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

Assume that the given string has enough memory.

Don't use any extra space(IN-PLACE)

Sample Input 1

a2b4c6

Sample Output 1

aabbbbccccccc

Answer:(penalty regime: 0 %)

Question 4

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a python program to count all letters, digits, and special symbols respectively from a given string

For example:

Input Result

rec@123

3

3

1

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

rec@123

3

3

1

3

3

1

P@#yn26at^&i5ve

8

3

4

8

3

4

abc@12&

3

2

2

3

2

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

Question text

Given two Strings s1 and s2, remove all the characters from s1 which is present in s2.

Constraints

1<= string length <= 200

Sample Input 1

experience

enc

Sample Output 1

xpri

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

experience

enc

xpri

xpri

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 6

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

Two string values S1, S2 are passed as the input. The program must print first N characters present in S1 which are also present in S2.

Input Format:

The first line contains S1.

The second line contains S2.

The third line contains N.

Output Format:

The first line contains the N characters present in S1 which are also present in S2.

Boundary Conditions:

2 <= N <= 10

2 <= Length of S1, S2 <= 1000

Example Input/Output 1:

Input:

abcbde

cdefghbb

3

Output:

bcd

Note:

b occurs twice in common but must be printed only once.

Answer:(penalty regime: 0 %)

Question 7

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program that takes as input a string (sentence), and returns its second word in uppercase.

For example:

If input is “Wipro Technologies Bangalore” the function should return “TECHNOLOGIES”

If input is “Hello World” the function should return “WORLD”

If input is “Hello” the program should return “LESS”

NOTE 1: If input is a sentence with less than 2 words, the program should return the word “LESS”.

NOTE 2: The result should have no leading or trailing spaces.

For example:

Input Result

Wipro Technologies Bangalore

TECHNOLOGIES

Hello World

WORLD

Hello

LESS

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

Wipro Technologies Bangalore

TECHNOLOGIES

TECHNOLOGIES

Hello World

WORLD

WORLD

Hello

LESS

LESS

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 8

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

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 %)

Question 9

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program to check if two strings are balanced. For example, strings s1 and s2 are balanced if all the characters in the s1 are present in s2. The character’s position doesn’t matter. If balanced display as "true" ,otherwise "false".

For example:

Input Result

Yn

PYnative

True

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

Yn

PYnative

True

True

Ynf

PYnative

False

False

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

Flag question

Question text

In this exercise, you will create a program that reads words from the user until the user enters a blank line. After the user enters a blank line your program should display each word entered by the user exactly once. The words should be displayed in the same order that they were first entered. For example, if the user enters:

first

second

first

third

second

then your program should display:

first

second

third

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

first

second

first

third

second

first

second

third

first

second

third

rec

cse

it

rec

cse

rec

cse

it

rec

cse

it

Passed all tests!

Week6_Coding

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Determine the factors of a number (i.e., all positive integer values that evenly divide into a number) and then return the pth element of the list, sorted ascending. If there is no pth element, return 0.

Example

n = 20

p = 3

The factors of 20 in ascending order are {1, 2, 4, 5, 10, 20}. Using 1-based indexing, if p = 3, then 4 is returned. If p > 6, 0 would be returned.

Constraints

$1 \leq n \leq 1015$

$1 \leq p \leq 109$

The first line contains an integer n, the number to factor.

The second line contains an integer p, the 1-based index of the factor to return.

Sample Case 0

Sample Input 0

10

3

Sample Output 0

5

Explanation 0

Factoring n = 10 results in {1, 2, 5, 10}. Return the p = 3rd factor, 5, as the answer.

Sample Case 1

Sample Input 1

10

5

Sample Output 1

0

Explanation 1

Factoring n = 10 results in {1, 2, 5, 10}. There are only 4 factors and p = 5, therefore 0 is returned as the answer.

Sample Case 2

Sample Input 2

1

1

Sample Output 2

1

Explanation 2

Factoring n = 1 results in {1}. The p = 1st factor of 1 is returned as the answer.

For example:

Input	Result
10 3 5	10 5
0 1 1	1 1

Answer:(penalty regime: 0 %)

Feedback

Input	Expected	Got
10 3 5	10 5	10 5
0 1 1	1 1	1 1

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given an array of numbers, find the index of the smallest array element (the pivot), for which the sums of all elements to the left and to the right are equal. The array may not be reordered.

Example

arr=[1,2,3,4,6]

- the sum of the first three elements, 1+2+3=6. The value of the last element is 6.
- Using zero based indexing, arr[3]=4 is the pivot between the two subarrays.
- The index of the pivot is 3.

Constraints

- $3 \leq n \leq 105$
- $1 \leq arr[i] \leq 2 \times 104$, where $0 \leq i < n$
- It is guaranteed that a solution always exists.

The first line contains an integer n, the size of the array arr.

Each of the next n lines contains an integer, arr[i], where $0 \leq i < n$.

Sample Case 0

Sample Input 0

4

1

2

3

3

Sample Output 0

2

Explanation 0

- The sum of the first two elements, 1+2=3. The value of the last element is 3.
- Using zero based indexing, arr[2]=3 is the pivot between the two subarrays.

· The index of the pivot is 2.

Sample Case 1

Sample Input 1

3

1

2

1

Sample Output 1

1

Explanation 1

· The first and last elements are equal to 1.

· Using zero based indexing, arr[1]=2 is the pivot between the two subarrays.

· The index of the pivot is 1.

For example:

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

Answer:(penalty regime: 0 %)

Feedback

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

1

1

1

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 3

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

Given an array A of sorted integers and another non negative integer k, find if there exists 2 indices i and j such that A[i] - A[j] = k, i != j.

Input Format

1. First line is number of test cases T. Following T lines contain:

2. N, followed by N integers of the array

3. The non-negative integer k

Output format

Print 1 if such a pair exists and 0 if it doesn’t.

Example

Input

1

3

1

3

5

4

Output:

1

Input

1

3

1

3

5

99

Output

0

For example:

Input	Result
1 3 1 3 5 4 1 1 3 1 3 5 99 0	

Answer:(penalty regime: 0 %)

Question 4

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

Write a Python program to check if a given list is strictly increasing or not. Moreover, If removing only one element from the list results in a strictly increasing list, we still consider the list true

Input:

n : Number of elements

List1: List of values

Output

Print "True" if list is strictly increasing or decreasing else print "False"

Sample Test Case

Input

7

1

2

3

0

4

5

6

Output

True

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

7

1

2

3

0

4

5

6

True

Run error

Traceback (most recent call last):

File "_tester_.python3", line 13, in <module>

if all(temp[j] < temp[j + i] for j in range(len(temp) - 1)):

^^^

File "_tester_.python3", line 13, in <genexpr>

```
    if all(temp[j] < temp[j + i] for j in range(len(temp) - 1)):
                ~~~~^^^^^^^^
```

IndexError: list index out of range

Testing was aborted due to error.

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

Incorrect

Marks for this submission: 0.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Complete the program to count frequency of each element of an array. Frequency of a particular element will be printed once.

Sample Test Cases

Test Case 1

Input

7

23

45

23

56

45

23

40

Output

23 occurs 3 times

45 occurs 2 times

56 occurs 1 times

40 occurs 1 times

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

7

23

45

23

56

45

23

40

23 occurs 3 times

45 occurs 2 times

56 occurs 1 times

40 occurs 1 times

23 occurs 3 times

45 occurs 2 times

56 occurs 1 times

40 occurs 1 times

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 6

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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

6

1

1

2

2

3

3

1 2 3

Answer:(penalty regime: 0 %)

Feedback

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

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 7

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

Consider a program to insert an element / item in the sorted array. Complete the logic by filling up required code in editable section. Consider an array of size 10. The eleventh item is the data is to be inserted.

Sample Test Cases

Test Case 1

Input

1

3

4

5

6

7

8

9

10

11

2

Output

ITEM to be inserted:2

After insertion array is:

1

2

3

4

5

6

7

8

9

10

11

Test Case 2

Input

11

22

33

55

66

77

88

99

110

120

44

Output

ITEM to be inserted:44

After insertion array is:

11

22

33

44

55

66

77

88

99

110

120

Answer:(penalty regime: 0 %)

Question 8

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Output is a merged array without duplicates.

Input Format

N1 - no of elements in array 1

Array elements for array 1

N2 - no of elements in array 2

Array elements for array2

Output Format

Display the merged array

Sample Input 1

5

1

2

3

6

9

4

2

4

5

10

Sample Output 1

1 2 3 4 5 6 9 10

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

5

1

2

3

6

9

4

2

4

5

10

1 2 3 4 5 6 9 10

1 2 3 4 5 6 9 10

7

4

7

8

10

12

30

35

9

1

3

4

5

7

8

11

13

22

1 3 4 5 7 8 10 11 12 13 22 30 35

1 3 4 5 7 8 10 11 12 13 22 30 35

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 9

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program to print all the locations at which a particular element (taken as input) is found in a list and also print the total number of times it occurs in the list. The location starts from 1.

For example, if there are 4 elements in the array:

5

6

5

7

If the element to search is 5 then the output will be:

5 is present at location 1

5 is present at location 3

5 is present 2 times in the array.

Sample Test Cases

Test Case 1

Input

4

5

6

5

7

5

Output

5 is present at location 1.

5 is present at location 3.

5 is present 2 times in the array.

Test Case 2

Input

5

67

80

45

97

100

50

Output

50 is not present in the array.

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

4

5

6

5

7

5

5 is present at location 1.

5 is present at location 3.

5 is present 2 times in the array.

5 is present at location 1.

5 is present at location 3.

5 is present 2 times in the array.

5

67

80

45

97

100

50

50 is not present in the array.

50 is not present in the array.

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a Python program to Zip two given lists of lists.

Input:

m : row size

n: column size

list1 and list 2 : Two lists

Output

Zipped List : List which combined both list1 and list2

Sample test case

Sample input

2

2

1

3

5

7

2

4

6

8

Sample Output

[[1, 3, 2, 4], [5, 7, 6, 8]]

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

2

2

1

2

3

4

5

6

7

8

[[1, 2, 5, 6], [3, 4, 7, 8]]

[[1, 2, 5, 6], [3, 4, 7, 8]]

Passed all tests!

Week7_Coding

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Write a program to eliminate the common elements in the given 2 arrays and print only the non-repeating

elements and the total number of such non-repeating elements.

Input Format:

The first line contains space-separated values, denoting the size of the two arrays in integer format respectively.

The next two lines contain the space-separated integer arrays to be compared.

Sample Input:

5 4

1 2 8 6 5

2 6 8 10

Sample Output:

1 5 10

3

Sample Input:

5 5

1 2 3 4 5

1 2 3 4 5

Sample Output:

NO SUCH ELEMENTS

For example:

Input Result

5 4

1 2 8 6 5

2 6 8 10

1 5 10

3

5 5

1 2 3 4 5

1 2 3 4 5

NO SUCH ELEMENTS

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

5 4

1 2 8 6 5

2 6 8 10

1 5 10

3

1 5 10

3

3 3

10 10 10

10 11 12

11 12

2

11 12

2

5 5

1 2 3 4 5

1 2 3 4 5

NO SUCH ELEMENTS

NO SUCH ELEMENTS

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given an array of strings words, return the words that can be typed using letters of the alphabet on only one row of American keyboard like the image below.

In the American keyboard:

the first row consists of the characters "qwertyuiop",

the second row consists of the characters "asdfghjkl", and

the third row consists of the characters "zxcvbnm".

Example 1:

Input: words = ["Hello","Alaska","Dad","Peace"]

Output: ["Alaska","Dad"]

Example 2:

Input: words = ["omk"]

Output: []

Example 3:

Input: words = ["adsdf","sfd"]

Output: ["adsdf","sfd"]

For example:

Input Result

4

Hello

Alaska

Dad

Peace

Alaska

Dad

2

adsfd

afd

adsfd

afd

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

4

Hello

Alaska

Dad

Peace

Alaska

Dad

Alaska

Dad

1

omk

No words

No words

2

adsfd

afd

adsfd

afd

adsfd

afd

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given a tuple and a positive integer k, the task is to find the count of distinct pairs in the tuple whose sum is equal to K.

Examples:

Input: t = (5, 6, 5, 7, 7, 8), K = 13

Output: 2

Explanation:

Pairs with sum K(= 13) are {(5, 8), (6, 7), (6, 7)}.

Therefore, distinct pairs with sum K(= 13) are { (5, 8), (6, 7) }.

Therefore, the required output is 2.

For example:

Input Result

1,2,1,2,5

3

1

1,2

0

0

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

5,6,5,7,7,8

13

2

2

1,2,1,2,5

3

1

1

1,2

0

0

0

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 4

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

There is a malfunctioning keyboard where some letter keys do not work. All other keys on the keyboard work properly.

Given a string text of words separated by a single space (no leading or trailing spaces) and a string brokenLetters of all distinct letter keys that are broken, return the number of words in text you can fully type using this keyboard.

Example 1:

Input: text = "hello world", brokenLetters = "ad"

Output:

1

Explanation: We cannot type "world" because the 'd' key is broken.

For example:

Input Result

hello world

ad

1

Faculty Upskilling in Python Programming

ak

2

Answer:(penalty regime: 0 %)

Feedback

Input Expected

hello world

ad

1

Welcome to REC

e

1

Faculty Upskilling in Python Programming

ak

2

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

Incorrect

Marks for this submission: 0.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

The DNA sequence is composed of a series of nucleotides abbreviated as 'A', 'C', 'G', and 'T'.

For example, "ACGAATTCCG" is a DNA sequence.

When studying DNA, it is useful to identify repeated sequences within the DNA.

Given a string s that represents a DNA sequence, return all the 10-letter-long sequences (substrings) that occur more than once in a DNA molecule. You may return the answer in any order.

Example 1:

Input: s = "AAAAACCCCCAAAAACCCCCCAAAAAGGGTTT"

Output: ["AAAAACCCCC","CCCCCAAAAA"]

Example 2:

Input: s = "AAAAAAAAAAAAA"

Output: ["AAAAAAAAAA"]

For example:

Input Result

AAAAACCCCCAAAAACCCCCCAAAAAGGGTTT

AAAAACCCCC

CCCCCAAAAA

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

AAAAACCCCCAAAAACCCCCCAAAAAGGGTTT

AAAAACCCCC

CCCCCAAAAA

AAAAACCCCC

CCCCCAAAAA

AAAAAAAAAAAAA

AAAAAAAAAA

AAAAAAAAAA

Passed all tests!

Week8_Coding

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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

Examples:

Input : votes[] = {"john", "johnny", "jackie",

"johnny", "john", "jackie",

"jamie", "jamie", "john",

"johnny", "jamie", "johnny",

"john"};

Output : John

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

Sample Input:

10

John

John

Johny

Jamie

Jamie

Johny

Jack

Johny

Johny

Jackie

Sample Output:

Johny

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

10

John

John

Johny

Jamie

Jamie

Johny

Jack

Johny

Johny

Jackie

Johny

Johny

6

Ida

Ida

Ida

Kiruba

Kiruba

Kiruba

Ida

Ida

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 2

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

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

1.Identify the student with the highest average score

2.Identify the student who as the highest Assignment marks

3.Identify the student with the Lowest lab marks

4.Identify the student with the lowest average score

Note:

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

Sample input:

4

James 67 89 56

Lalith 89 45 45

Ram 89 89 89

Sita 70 70 70

Sample Output:

Ram

James Ram

Lalith

Lalith

For example:

Input Result

4

James 67 89 56

Lalith 89 45 45

Ram 89 89 89

Sita 70 70 70

Ram

James Ram

Lalith

Lalith

Answer:(penalty regime: 0 %)

Feedback

Input Expected

4

James 67 89 56

Lalith 89 45 45

Ram 89 89 89

Sita 70 70 70

Ram

James Ram

Lalith

Lalith

3

Raja 95 67 90

Aarav 89 90 90

Shadhana 95 95 91

Shadhana

Shadhana

Aarav Raja

Raja

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

Incorrect

Marks for this submission: 0.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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

Points Letters

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

2 D and G

3 B, C, M and P

4 F, H, V, W and Y

5 K

8 J and X

10 Q and Z

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

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

Sample Input

REC

Sample Output

REC is worth 5 points.

For example:

Input Result

REC

REC is worth 5 points.

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

GOD

GOD is worth 5 points.

GOD is worth 5 points.

REC

REC is worth 5 points.

REC is worth 5 points.

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 4

Not answered

Mark 0.00 out of 1.00

Flag question

Question text

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

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

Example 1:

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

Output: ["sweet","sour"]

Example 2:

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

Output: ["banana"]

Constraints:

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

s1 and s2 consist of lowercase English letters and spaces.

s1 and s2 do not have leading or trailing spaces.

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

Note:

Use dictionary to solve the problem

For example:

Input Result

this apple is sweet

this apple is sour

sweet sour

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

this apple is sweet

this apple is sour

sweet sour

Run error

```
Traceback (most recent call last):
  File "_tester_.python3", line 13, in <module>
    result=uncommon_words(s1,s2)
           ^^^^^^^^^^^^^^
NameError: name 'uncommon_words' is not defined
```

Testing was aborted due to error.

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

Incorrect

Marks for this submission: 0.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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

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

Output : {‘Gfg’: 17, ‘best’: 18}

Explanation : Sorted by sum, and replaced.

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

Output : {‘best’: 10, ‘Gfg’: 16}

Explanation : Sorted by sum, and replaced.

Sample Input:

2

Gfg 6 7 4

Best 7 6 5

Sample Output

Gfg 17

Best 18

For example:

Input Result

2

Gfg 6 7 4

Best 7 6 5

Gfg 17

Best 18

Answer:(penalty regime: 0 %)

Feedback

Input Expected Got

2

Gfg 6 7 4

Best 7 6 5

Gfg 17

Best 18

Gfg 17

Best 18

2

Gfg 6 6

Best 5 5

Best 10

Gfg 12

Best 10

Gfg 12

Passed all tests!

Week9_Coding

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given a number with maximum of 100 digits as input, find the difference between the sum of odd and even position digits.

Input Format:

Take a number in the form of String from stdin.

Output Format:

Print the difference between sum of even and odd digits

Example input:

1453

Output:

1

Explanation:

Here, sum of even digits is 4 + 3 = 7

sum of odd digits is 1 + 5 = 6.

Difference is 1.

Note that we are always taking absolute difference

Answer:(penalty regime: 0 %)

Feedback

Test Expected Got

print(differenceSum(1453))

1

1

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

Flag question

Question text

A number is considered to be ugly if its only prime factors are 2, 3 or 5.

[1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 15, …] is the sequence of ugly numbers.

Task:

complete the function which takes a number n as input and checks if it's an ugly number.

return ugly if it is ugly, else return not ugly

Hint:

An ugly number U can be expressed as: U = 2^a * 3^b * 5^c, where a, b and c are nonnegative integers.

For example:

Test	Result
print(checkUgly(6))	ugly
print(checkUgly(21))	not ugly

Answer:(penalty regime: 0 %)

Feedback

Test	Expected	Got
print(checkUgly(6))	ugly	ugly
print(checkUgly(21))		

not ugly

not ugly

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 3

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

complete function to implement coin change making problem i.e. finding the minimum

number of coins of certain denominations that add up to given amount of money.

The only available coins are of values 1, 2, 3, 4

Input Format:

Integer input from stdin.

Output Format:

return the minimum number of coins required to meet the given target.

Example Input:

16

Output:

4

Explanation:

We need only 4 coins of value 4 each

Example Input:

25

Output:

7

Explanation:

We need 6 coins of 4 value, and 1 coin of 1 value

Answer:(penalty regime: 0 %)

Feedback

Test Expected Got

print(coinChange(16))

4

16

Some hidden test cases failed, too.

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

Incorrect

Marks for this submission: 0.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Flag question

Question text

An e-commerce company plans to give their customers a special discount for Christmas.

They are planning to offer a flat discount. The discount value is calculated as the sum of all the prime digits in the total bill amount.

Write an algorithm to find the discount value for the given total bill amount.

Constraints

1 <= orderValue< 10e100000

Input

The input consists of an integer orderValue, representing the total bill amount.

Output

Print an integer representing the discount value for the given total bill amount.

Example Input

578

Output

12

For example:

Test Result

print(christmasDiscount(578))

12

Answer:(penalty regime: 0 %)

Feedback

Test Expected Got

print(christmasDiscount(578))

12

12

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

An abundant number is a number for which the sum of its proper divisors is greater than

the number itself. Proper divisors of the number are those that are strictly lesser than the number.

Input Format:

Take input an integer from stdin

Output Format:

Return Yes if given number is Abundant. Otherwise, print No

Example input:

12

Output:

Yes

Explanation

The proper divisors of 12 are: 1, 2, 3, 4, 6, whose sum is 1 + 2 + 3 + 4 + 6 = 16. Since sum of proper divisors is greater than the given number, 12 is an abundant number.

Example input:

13

Output:

No

Explanation

The proper divisors of 13 is: 1, whose sum is 1. Since sum of proper divisors is not greater than the given number, 13 is not an abundant number.

For example:

Test	Result
print(abundant(12))	Yes
print(abundant(13))	No

Feedback

Test	Expected	Got
print(abundant(12))	Yes	Yes
print(abundant(13))	No	No