

RAJALAKSHMI ENGINEERING COLLEGE
RAJALAKSHMI NAGAR, THANDALAM – 602 105



**RAJALAKSHMI
ENGINEERING COLLEGE**

**GE23231
PROGRAMMING USING PYTHON**

Record Note Book

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Semester:	II
Department:	CIVIL ENGINEERING
Academic Year:	2023-2024

WEEK 1 MCQ

Started on	Thursday, 14 March 2024, 10:56 AM
State	Finished
Completed on	Thursday, 14 March 2024, 11:13 AM
Time taken	17 mins 1 sec
Grade	10.00 out of 10.00 (100%)

Question 1

Correct

Mark 1.00 out of 1.00

[Flag question](#)

Question text

What will be the output of the following code snippet?

```
print(type(5 / 2))
```

Question 1 Answer



a.

obj



b.

float



c.

int



d.

str

Feedback

Your answer is correct.

The correct answer is:

float

Question 2

Correct

Mark 1.00 out of 1.00

WEEK 1 MCQ

Flag question

Question text

What will be the output of the following python Code-

```
mystring="India is my country"  
print(type(mystring))
```

Question 2Answer



a.



b.

<class 'str'>



c.

'str'



d.

class str

Feedback

Your answer is correct.

The correct answer is:

<class 'str'>

Question 3

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What will be the datatype of the var in the below code snippet?

```
var = 10  
  
print(type(var))  
  
var = "Hello"  
  
print(type(var))
```

WEEK 1 MCQ

Question 3Answer

a.

No output

b.

float and str

c.

int and int

d.

int and str

Feedback

Your answer is correct.

The correct answer is:

int and str

Question 4

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Who developed the Python language?

Question 4Answer

a.

Guido Van Rossum

b.

Dennis Ritchie

c.

Bill Gates

d.

WEEK 1 MCQ

Von Neumann

Feedback

Your answer is correct.

The correct answer is:

Guido Van Rossum

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What do we use to define a block of code in Python language?

Question 5Answer



a.

Indentation



b.

Curly brace



c.

Key



d.

Parenthesis

Feedback

Your answer is correct.

The correct answer is:

Indentation

Question 6

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What will be the output of the following code snippet?

WEEK 1 MCQ

```
a = 3  
b = 1  
print(a, b)  
a, b = b, a  
print(a, b)
```

Question 6Answer

a.

1 3

3 1

b.

No output

c.

3 1

3 1

d.

3 1

1 3

Feedback

Your answer is correct.

The correct answer is:

3 1

1 3

Question 7

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Type the code to get float input from the keyboard. (No need to assign to a variable)

WEEK 1 MCQ

Answer: Question 7

Feedback

The correct answer is: float(input())

Question 8

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Which one of the following is the correct extension of the Python file?

Question 8Answer



a.



b.



.py



c.



.cpp



d.

.python

Feedback

Your answer is correct.

The correct answer is:

.py

Question 9

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Which of the following [functions](#) is a built-in function in python language?

Question 9Answer

WEEK 1 MCQ



a.
scanf()



b.
val()



c.
print()



d.
printf()

[Feedback](#)

Your answer is correct.

The correct answer is:

print()

Question 10

Correct

Mark 1.00 out of 1.00

[Flag question](#)

[Question text](#)

Which of the following declarations is incorrect in python language?

Question 10Answer



a.
x_y_z_p = 5,000,000



b.
xyzp = 5,000,000



c.
x,y,z,p = 5000, 6000, 7000, 8000

WEEK 1 MCQ



d.

$x \ y \ z \ p = 5000 \ 6000 \ 7000 \ 8000$

[Feedback](#)

Your answer is correct.

The correct answer is:

$x,y,z,p = 5000, 6000, 7000, 8000$

WEEK 2 MCQ

Started on	Tuesday, 26 March 2024, 10:50 PM
State	Finished
Completed on	Tuesday, 26 March 2024, 10:59 PM
Time taken	8 mins 12 secs
Grade	15.00 out of 15.00 (100%)

Question 1

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following code

```
x = ["apple", "banana", "cherry"]
```

```
#display the data type of x:
```

```
print(type(x))
```

Question 1 Answer



a.

<class 'float'>



b.

<class 'complex'>



c.

<class 'int'>

WEEK 2 MCQ



d.

<class 'list'>

Feedback

Your answer is correct.

The correct answer is:

<class 'list'>

Question 2

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following statements assigns the value 35 to the variable x in Python:

Question 2Answer



a.

x = 35

WEEK 2 MCQ

b.

x ← 35

c.

x := 35

d.

int x = 35

Feedback

Your answer is correct.

The correct answer is:

x = 35

Question 3

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What is the output of the following expression?

z=2

z=3**

print(z)

WEEK 2 MCQ

Question 3Answer



a.

3



b.

8



c.

Error



d.

0

Feedback

Your answer is correct.

The correct answer is:

8

Question 4

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following assignment operator?

```
y = 10  
x = y += 2  
print(x)
```

Question 4Answer



a.

WEEK 2 MCQ

10

b.

Syntax Error

c.

14

d.

12

Feedback

Your answer is correct.

The correct answer is:

Syntax Error

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What is the two's complement of -44?

Question 5 Answer

a.

11010100

b.

10110011

c.

1011011

d.

11101011

Feedback

WEEK 2 MCQ

Your answer is correct.

The correct answer is:

11010100

Question 6

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following is not a valid variable name in Python?

Question 6Answer



a.

var11



b.

var_name



c.

_var



d.

5var

Feedback

Your answer is correct.

WEEK 2 MCQ

The correct answer is:

5var

Question **7**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which is the following is an Arithmetic operator in Python?

1. // (floor division) operator
2. & (binary and) operator
3. ~ (navigation) operator
4. >> (right shift) operator

Question 7Answer



a.

2



b.

3



c.

1



d.

4

Feedback

Your answer is correct.

The correct answer is:

1

WEEK 2 MCQ

Question 8

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the value of the expression

`print(100 / 25)`

`print(100//25)`

Question 8Answer



a.

4

4



b.

4.0

4.00



c.

4.0

4.0



d.

4.0

4

Feedback

Your answer is correct.

The correct answer is:

4.0

4

Question 9

Correct

WEEK 2 MCQ

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following code

x = 4

y = 10

print(x % y)

Question 9Answer



a.

6



b.

1



c.

4



d.

10

Feedback

Your answer is correct.

The correct answer is:

4

Question **10**

Correct

Mark 1.00 out of 1.00



Flag question

WEEK 2 MCQ

Question text

What is the output of the following code

`x = ["apple", "banana"]`

`y = ["apple", "banana"]`

`z = x`

`print(x is z)`

`print(x is y)`

`print(x == y)`

Question 10Answer



a.

False

False

True



b.

True

False

True



c.

True

True

True



d.

True

False

False

WEEK 2 MCQ

Feedback

Your answer is correct.

The correct answer is:

True

False

True

Question 11

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following code

```
x = 8  
y = 2  
print(x ** y)  
print(x // y)
```

Question 11Answer



a.

64

4



b.

64

0



c.

64

8

4



WEEK 2 MCQ

d.
0
64

[Feedback](#)

Your answer is correct.

The correct answer is:

64
4

Question 12

Correct
Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

What will be the value of x in the following Python expression, if the result of that expression is 2?

x>>2

Question 12Answer

a.
2

b.
1

c.
8

d.
4

[Feedback](#)

Your answer is correct.

The correct answer is:

WEEK 2 MCQ

8

Question 13

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following code

`x = 5`

`y = 3`

`print(x == y)`

Question 13Answer



a.

`5==3`



b.

Error



c.

True



d.

False

Feedback

Your answer is correct.

The correct answer is:

False

Question 14

Correct

Mark 1.00 out of 1.00

WEEK 2 MCQ



Flag question

Question text

What will be the output of the following statement?

`print(15 + 20 / 5 + 3 * 2 - 1)`

Question 14Answer



a.
19



b.
12



c.
24.0



d.
19.0

Feedback

Your answer is correct.

The correct answer is:

24.0

Question **15**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the value of the expression **1+2**3*4+12*((100+4)*10-200//10)** ?

WEEK 2 MCQ

Question 15 Answer

a.

-24568

b.

12273

c.

12493

d.

-23679

Feedback

Your answer is correct.

The correct answer is:

12273

WEEK 3 MCQ

Started on	Thursday, 28 March 2024, 12:16 PM
State	Finished
Completed on	Thursday, 28 March 2024, 12:36 PM
Time taken	20 mins 30 secs
Grade	12.00 out of 15.00 (80%)

Question 1

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What keyword would you use to add an alternative condition to an if statement?

Question 1 Answer



a.

else if



b.

elif



c.

elseif

Feedback

Your answer is correct.

The correct answer is:

elif

Question 2

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

What will be the output for the following code?

if 1-1:

WEEK 3 MCQ

```
print("python")
else:
    print("0 is false")
```

Question 2Answer



a.

0 is false



b.

python



c.

Error

[Feedback](#)

Your answer is incorrect.

The correct answer is:

0 is false

Question 3

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

selection is implemented with the help
of _____ statement

Question 3Answer



a.

for loop



b.

if..else

WEEK 3 MCQ



- C.
while loop

[Feedback](#)

Your answer is correct.

The correct answer is:
if..else

Question 4

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

Correct syntax of writing 'simple if' statement is ____

Question 4Answer



- a.
if condition :
statements



- b.
if (condition)
statements



- c.
if condition --
statements

WEEK 3 MCQ

d.

if condition

statements

Feedback

Your answer is correct.

The correct answer is:

if condition :
statements

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What is the output of the given below program?

if 1 + 3 == 7:

print("Hello")

else:

print("REC")

Question 5Answer

a.

Hello

b.

REC

c.

Compiled Successfully, No Output.

Feedback

WEEK 3 MCQ

Your answer is correct.

The correct answer is:

REC

Question 6

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the value of x at the end of the following sequence of instructions?

```
x = 10  
x = x * 3  
x = x + 5
```

Question 6 Answer



a.

45



b.

30



c.

15



d.

35

Feedback

Your answer is correct.

The correct answer is:

35

Question 7

Correct

Mark 1.00 out of 1.00



Flag question

WEEK 3 MCQ

Question text

___ is an empty statement in Python.

Question 7Answer



- a.
pass



- b.
Jump



- c.
Empty



- d.
None

Feedback

Your answer is correct.

The correct answer is:

pass

Question 8

Correct

Mark 1.00 out of 1.00



Flag question

Question text

choose a valid Python if statement :

Question 8Answer



- a.
if (a => 22)



WEEK 3 MCQ

b.
if (a >= 2)



c.
if a>=2 :

[Feedback](#)

Your answer is correct.

The correct answer is:

if a>=2 :

Question 9

Incorrect

Mark 0.00 out of 1.00



[Flag question](#)

[Question text](#)

What is the output of the following code

x=3

if x>2 or x<5 and x==6:

 print("ok")

else:

 print("no output")

Question 9Answer



a.

None of the given option



b.

ok



c.

error



WEEK 3 MCQ

- d.
no output

[Feedback](#)

Your answer is incorrect.

The correct answer is:

ok

Question 10

Correct

Mark 1.00 out of 1.00



[Flag question](#)

Question text

What is the output of the following code :

```
x=True  
y=False  
z=False  
  
if x or y and z:  
    print("YES")  
elif x and y or z:  
    print("yes")  
else:  
    print("no")
```

Question 10Answer



- a.
yes



- b.
no



- c.
YES

WEEK 3 MCQ



- d.
Error

Feedback

Your answer is correct.

The correct answer is:

YES

Question 11

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following statements correctly represents taking input from user in python?

Question 11Answer



a.

`a=inp("Enter the value")`



b.

`a=input("Enter the value")`



c.

`a=get("Enter the value")`



d.

None of the mentioned

Feedback

Your answer is correct.

The correct answer is:

`a=input("Enter the value")`

Question 12

Incorrect

Mark 0.00 out of 1.00



Flag question

WEEK 3 MCQ

Question text

Question 12Answer

a.

Name Error

b.

No output

c.

Hello World

Feedback

Your answer is incorrect.

The correct answer is:

Name Error

Question **13**

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What is the output of the given below program?

a = 25

if a > 15:

print("Hi")

if a <= 30:

print("Hello")

else:

print("Know Program")

WEEK 3 MCQ

Question 13Answer



a.

Hi

Know Program



b.

Hello



c.

Hello

Know Program



d.

Hi

Hello

Feedback

Your answer is correct.

The correct answer is:

Hi

Hello

Question **14**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What keyword would you use to add an alternative condition to an if statement?

Question 14Answer

WEEK 3 MCQ

- a.
None of the above

- b.
elif

- c.
else if

- d.
elseif

[Feedback](#)

Your answer is correct.

The correct answer is:

elif

Question 15

Correct

Mark 1.00 out of 1.00

[Flag question](#)

[Question text](#)

Which of the following options correctly prints the phrase “Hurry Up!!”?

Question 15 Answer

- a.
`print_sentence(Hurry Up!!!)`

- b.
`print(Hurry Up!!!)`

- c.
`print("Hurry Up!!")`

WEEK 3 MCQ

d.

`printf("Hurry Up!!")`

[Feedback](#)

Your answer is correct.

The correct answer is:

`print("Hurry Up!!")`

WEEK 4 MCQ

Started on	Wednesday, 10 April 2024, 8:27 AM
State	Finished
Completed on	Wednesday, 10 April 2024, 8:36 AM
Time taken	8 mins 26 secs

Question 1

Complete



Flag question

Question text

```
count = 0
while(True):
    if count % 3 == 0:
        print(count, end = " ")
    if(count > 18):
        break;
    count += 1
```

Predict the output of the program?

Question 1Answer



a.

0 3 6 9 12 15



b.

0 3 9 12 18



c.

Compilation error



d.

0 3 6 9 12 15 18

Question 2

Complete



Flag question

Question text

Which is a counter-controlled in python?

Question 2Answer



WEEK 4 MCQ

- a.
for
- b.
do-while
- c.
while
- d.
switch

Question 3

Complete

Flag question

Question text

For loop follows which principle?

Question 3Answer

-
- a.
Open/closed
- b.
You Aren't Going to Need It(YAGNI)
- c.
Don't Repeat Yourself (DRY)
- d.
Single responsibility

Question 4

Complete

Flag question

Question text

Which one of them is the correct syntax of for loop in python ?

Question 4Answer

WEEK 4 MCQ



- a.
for [item] in [item]:
 loop body



- b.
for[sequence] in [item]:
 loop body



- c.
for[sequence] in [sequence]:
 loop body



- d.
for [item] in [sequence]:
 loop body

Question 5

Complete



Flag question

Question text

Predict the output of the program?

for x in range(2, 8, 5):
 print(x)

Question 5 Answer



- a.
2 3 4 5 6 7 8



- b.
2 4 6 8



- c.
2 7



- d.
2 8

Question 6

Complete

WEEK 4 MCQ



Flag question

Question text

The range() function by defaults increments by

Answer: Question 6

1

Question 7

Complete



Flag question

Question text

Syntax of range()

Question 7 Answer



a.

(start, stop, step)



b.

(stop, step, start)



c.

(start, step, stop)



d.

(step, stop, start)

Question 8

Complete



Flag question

Question text

Which one of them is the correct syntax of for loop in python ?

Question 8 Answer



a.

for [item] in [sequence]:
 loop body



b.

WEEK 4 MCQ

- for [item] in [item]:
 loop body
-
- c.
for[sequence] in [item]:
 loop body
-
- d.
for[sequence] in [sequence]:
 loop body

Question 9

Complete

Flag question

Question text

Which of the following is an infinite loop?

Question 9Answer

-
- a.
while(i==2):
-
- b.
while(infinite):
-
- c.
while(0):
-
- d.
while(1):

Question 10

Complete

Flag question

Question text

Syntax of range()

Question 10Answer

-
- a.

WEEK 4 MCQ

(start, stop, step)

b.

(step, stop, start)

c.

(stop, step, start)

d.

(start, step, stop)

Question 11

Complete

Flag question

Question text

A while loop in python is used for what type of iteration?

Question 11 Answer

a.

discriminant

b.

indefinite

c.

definite

d.

indiscriminant

Question 12

Complete

Flag question

Question text

A for loop can iterate over a

Question 12 Answer

WEEK 4 MCQ

a.

list

b.

float

c.

bool

d.

integer

Question 13

Complete



Flag question

Question text

```
i = 0
while i < 3 :
    print(i)
    i += 1
    if i == 2:
        continue
    else:
        print(0)
```

What is the output of the following?

Question 13 Answer



a.

0

0

1

2

0



b.

0

WEEK 4 MCQ

1

2

0



c.

0

1

1

1

0



d.

0

0

1

1

0

Question 14

Complete



Flag question

Question text

Which of the following is a loop in python?

Question 14Answer



a.

For



b.

If-Else



c.

Do-While



d.

WEEK 4 MCQ

Break

Question 15

Complete



Flag question

Question text

How many times the loop run?

for i in range(-3):

 print(i)

Answer: Question 15

4

WEEK 5 MCQ

Started on	Sunday, 28 April 2024, 7:54 PM
State	Finished
Completed on	Sunday, 28 April 2024, 8:22 PM
Time taken	27 mins 27 secs
Grade	8.00 out of 15.00 (53.33%)

Question 1

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

What is the output of the following code?

```
str1='vijayakumar'  
str2='.'  
str3='---'  
print(str1[-1:])
```

Question 1 Answer



a.
vijayakuma



b.
ramukayajiv



c.
'r'



d.
None of the above

Feedback

Your answer is incorrect.

The correct answer is:

'r'

Question 2

Correct

Mark 1.00 out of 1.00



Flag question

WEEK 5 MCQ

Question text

What is the output of the following Code?

```
str1="arvijayakumar"  
print(str1[::-1])
```

Answer: Question 2

Feedback

The correct answer is: ramukayajivra

Question 3

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

```
my_string = "arvijayakumar"  
i = "i"  
while i in my_string:  
    print(i, end = " ")
```

Question 3 Answer



a.

a r v j a y a k u m a r



b.

None



c.

i i i i i ...



WEEK 5 MCQ

d.

arvjayakumar

Feedback

Your answer is incorrect.

The correct answer is:

None

Question 4

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following code?

```
str1="vijay"  
for i in range(len(str1)):  
    print(i, end="")
```

Question 4Answer



a.

vijay



b.

01234



c.

None of the above



d.

No output

Feedback

Your answer is correct.

The correct answer is:

01234

Question 5

Correct

Mark 1.00 out of 1.00

WEEK 5 MCQ



Flag question

Question text

What is the output of the following Code?

```
print(ord('B'))
```

Answer: Question 5

Feedback

The correct answer is: 66

Question 6

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following?

```
i = 0
while i < 3:
    print(i)
    i += 1
else:
    print(0)
```

Question 6 Answer



a.

0 1 2 3 0



b.

0 1 2



c.

0 1 2 0

WEEK 5 MCQ



- d.
Error

Feedback

Your answer is correct.

The correct answer is:

0 1 2 0

Question 7

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What will be the output of the following code?

a = 'ab'

b = 4

print(a*b)

Answer: Question 7

abababab

Feedback

The correct answer is: abababab

Question 8

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What is the index value of 'i' in string "Learning"

Question 8Answer



- a.
5

b.
7

WEEK 5 MCQ

C.

3

D.

6

Feedback

Your answer is correct.

The correct answer is:

5

Question 9

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

Which of the following will result in an error?

str1="python"

Question 9Answer

A.

print(str1[2])

B.

None of the mentioned

C.

str1[1]="x"

D.

print(str1[0:9])

Feedback

Your answer is incorrect.

The correct answer is:

str1[1]="x"

Question 10

Correct

WEEK 5 MCQ

Mark 1.00 out of 1.00



Flag question

Question text

What is the output of the following code?

```
print("rec. VIJAY".capitalize())
```

Question 10Answer



a.

Rec. vijay



b.

rec. vijay



c.

REC. VIJAY



d.

Rec. Vijay

Feedback

Your answer is correct.

The correct answer is:

Rec. vijay

Question 11

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

Which of the following will give "Vijay" as output?

```
str1="John,Vijay,Aryan"
```

Question 11Answer



a.

```
print(str1[-7:-12])
```



b.

WEEK 5 MCQ

`print(str1[-11:-6])`

C.

`print(str1[-11:-7])`

d.

`print(str1[-7:-11])`

Feedback

Your answer is incorrect.

The correct answer is:

`print(str1[-11:-6])`

Question 12

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What is the output of the following Code?

`print(chr(70))`

Answer: Question 12

F

Feedback

The correct answer is: F

Question 13

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

What will the below Python code will return?

`str1="save paper,save plants"`

`str1.find("save")`

Question 13Answer

a.

It returns the first index position of the first occurrence of "save" in the given string

`str1.`

WEEK 5 MCQ



b.

It returns the last index position of the first occurrence of "save" in the given string str1.



c.

It returns the first index position of the last occurrence of "save" in the given string str1.



d.

It returns the last index position of the last occurrence of "save" in the given string str1.

Feedback

Your answer is incorrect.

The correct answer is:

It returns the first index position of the first occurrence of "save" in the given string str1.

Question 14

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

What is the output of "hello"+1+2+3 ?

Question 14Answer



a.

hello6



b.

hello



c.

hello123



d.

WEEK 5 MCQ

Error

Feedback

Your answer is incorrect.

The correct answer is:

Error

1.

Question 15

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

Which of the following is False?

Question 15Answer



a.

None of the mentioned



b.

lower() function in string is used to return a string by converting the whole given string into lowercase.



c.

String is immutable.



d.

capitalize() function in string is used to return a string by converting the whole given string into uppercase.

Feedback

Your answer is incorrect.

The correct answer is:

capitalize() function in string is used to return a string by converting the whole given string into uppercase.

WEEK 6 MCQ

Started on	Sunday, 26 May 2024, 8:51 PM
State	Finished
Completed on	Sunday, 26 May 2024, 9:07 PM
Time taken	16 mins 28 secs
Grade	10.50 out of 15.00 (70%)

Question 1

Correct

Mark 1.00 out of 1.00

[Flag question](#)

Question text

What will be the output of the following Python code?

```
1. >>>names = ['Amir', 'Bear', 'Charlton',
   'Vaishali']
2. >>>print(names[-1][-1])
```

Question 1 Answer



a.

A



b.

Vaishali



c.

i

Feedback

Your answer is correct.

The correct answer is:

i

Question 2

Incorrect

Mark 0.00 out of 1.00

[Flag question](#)

Question text

WEEK 6 MCQ

Fill in the blanks with same word in both places

```
>>> import _____  
>>> list1 = [1,2,3,4,5]  
>>> list2 = _____copy(list1)  
>>> list2
```

Question 2Answer



a.

Copy



b.

Math



c.

Pickle

Feedback

Your answer is incorrect.

The correct answer is:

Copy

Question 3

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Suppose listExample is ['h','e','l','l','o'], what is len(listExample)?

Question 3Answer



a.

5



b.

Error

WEEK 6 MCQ



- C.
4

Feedback

Your answer is correct.

The correct answer is:

- 5

Question 4

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

Find the output?

```
list1 = list('REC_CSE_ECE')  
print('r' not in list1)
```

Question 4 Answer



- a.
false



- b.
true



- c.
False



- d.
True

Feedback

Your answer is incorrect.

The correct answer is:

True

Question 5

Correct

WEEK 6 MCQ

Mark 1.00 out of 1.00

Flag question

Question text

Find the output?

```
list1 = [1, 2, 3, 4, 1, 2, 3]
```

```
print(list1.pop())
```

Question 5Answer



a.

3



b.

1



c.

2



d.

[]

Feedback

Your answer is correct.

The correct answer is:

3

Question 6

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What will be the output after the following statements?

```
m = ['July', 'September', 'December']
```

```
n = m[1]
```

```
print
```

Question 6Answer



WEEK 6 MCQ

a.
December

b.
['July', 'September', 'December']

c.
July

d.
September

Feedback

Your answer is correct.

The correct answer is:
September

Question 7

Correct

Mark 1.00 out of 1.00

[Flag question](#)

Question text

What will be the output after the following statements?

```
m = [25, 34, 70, 63]  
n = str(m[1]) +str(m[2])  
print( n )
```

Question 7Answer

a.
95

b.
104

c.
3470

d.
2534

WEEK 6 MCQ

Feedback

Your answer is correct.

The correct answer is:

3470

Question 8

Correct

Mark 1.00 out of 1.00

[Flag question](#)

Question text

To add a new element to a [list](#) we use which command?

Question 8Answer



a.

list1.add(5)



b.

list1.append(5)



c.

list1.addEnd(5)

Feedback

Your answer is correct.

The correct answer is:

list1.append(5)

Question 9

Correct

Mark 1.00 out of 1.00

[Flag question](#)

Question text

What is the output of the following code?

```
list1 = ["hi", "we", "are", "the", "elements", "in", "a", "List"]
for i in range(4):
    print(list1[i])
```

WEEK 6 MCQ

Question 9 Answer



a.

hi we are the



b.

hi we are



c.

hi we are the elements



d.

hi we are the elements in a list

Feedback

Your answer is correct.

The correct answer is:

hi we are the

Question 10

Correct

Mark 1.00 out of 1.00

[Flag question](#)

Question text

1. >>>list1 = [1, 3]
2. >>>list2 = list1
3. >>>list1[0] = 4
4. >>>print(list2)

Answer: Question 10

[4, 3]

Feedback

The correct answer is: [4, 3]

Question 11

Correct

Mark 1.00 out of 1.00

[Flag question](#)

WEEK 6 MCQ

Question text

Suppose list1 is [2, 33, 222, 14, 25], What is list1[-3]?

Question 11Answer

a.

14

b.

222

c.

25

Feedback

Your answer is correct.

The correct answer is:

222

Question 12

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

Find the output?

```
list1 = list('REC_CSE_ECE')  
print(list1.index('_'))
```

Question 12Answer

a.

-4

b.

4

c.

3

WEEK 6 MCQ



d.

AttributeError: 'list' object has no attribute 'find'

[Feedback](#)

Your answer is incorrect.

The correct answer is:

AttributeError: 'list' object has no attribute 'find'

Question 13

Correct

Mark 1.00 out of 1.00

[Flag question](#)

[Question text](#)

Find the output?

```
list1 = [1, 2, 3, 4, 1, 2, 3]
```

```
list1.reverse()
```

```
print(list1)
```

Question 13 Answer



a.

[3, 2, 1, 4, 3, 2, 1]



b.

[1, 1, 2, 2, 3, 3, 4]



c.

[1, 2, 3, 4, 1, 2, 3]



d.

[4, 3, 3, 2, 2, 1, 1]

[Feedback](#)

Your answer is correct.

The correct answer is:

[3, 2, 1, 4, 3, 2, 1]

WEEK 6 MCQ

Question 14

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

```
L=[0.5 * x for x in range(4)]
```

```
print(L)
```

Answer: Question 14 [0.0,0.5,1.0,1.5]

Feedback

The correct answer is: [0.0, 0.5, 1.0, 1.5]

Question 15

Partially correct

Mark 0.50 out of 1.00

Flag question

Question text

what is correct syntax to copy one list into another list?

Question 15 Answer



a.

listA = list(listB)



b.

listA = listB[]()



c.

listA = listB[]



d.

listA = listB[:]

WEEK 6 MCQ

Feedback

Your answer is partially correct.

You have correctly selected 1.

The correct answers are:

listA = listB[:],

listA = list(listB)

WEEK 7 MCQ

Started on	Sunday, 26 May 2024, 9:08 PM
State	Finished
Completed on	Sunday, 26 May 2024, 9:29 PM
Time taken	20 mins 38 secs
Grade	10.00 out of 15.00 (66.67%)

Question 1

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

What is the output of the following `set` operation

```
sampleSet = {"Yellow", "Orange", "Black"}  
sampleSet.update(["Blue", "Green", "Red"])  
print(sampleSet)
```

Question 1 Answer



a.

{'Yellow', 'Orange', 'Black', ["Blue", "Green", "Red"]}



b.

`TypeError: update() doesn't allow list as a argument.`



c.

Name Error



d.

{'Yellow', 'Orange', 'Red', 'Black', 'Green', 'Blue'}

Feedback

Your answer is incorrect.

WEEK 7 MCQ

The correct answer is:

{'Yellow', 'Orange', 'Red', 'Black', 'Green', 'Blue'}

Question 2

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following options will produce the same output?

```
t = (15, 83, 21, 49, 60, 45, 52, 85, 100)
# options i, ii, iii, or iv
print(t[:-1])
print(t[0:5])
print(t[0:8])
print(t[-7:])
```

Question 2 Answer



a.

i,ii



b.

ii,iv



c.

iii,iv



d.

i,iii

Feedback

Your answer is correct.

The correct answer is:

i,iii

Question 3

Correct

Mark 1.00 out of 1.00



Flag question

WEEK 7 MCQ

Question text

A python tuple can be created without using any parentheses. (True/False)

Question 3Answer



a.

True



b.

False

Feedback

Your answer is correct.

The correct answer is:

True

Question 4

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

What will the below Python code do?

```
set1={2,3}  
  
set2={3,2}  
  
set3={2,1}  
  
if(set1==set2):  
    print("yes")  
  
else:  
    print("no")  
  
if(set1==set3):  
    print("yes")  
  
else:  
    print("no")
```

WEEK 7 MCQ

Question 4Answer

a.

Yes, No

b.

Yes, Yes

c.

"==" is not supported for `set` in Python

d.

No, No

Feedback

Your answer is incorrect.

The correct answer is:

Yes, No

Question 5

Correct

Mark 1.00 out of 1.00

Flag question

Question text

What will be the output of following Python code?

```
set1={0,0,9}
```

```
print(set1)
```

Question 5Answer

a.

{9}

WEEK 7 MCQ

b.
 $\{0,0,9\}$



c.
 $\{0,9\}$



d.

It will throw an error as there are two 0 while creating the [set](#).

[Feedback](#)

Your answer is correct.

The correct answer is:

$\{0,9\}$

Question 6

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

What is the output of the given below program?

```
my_t1 = (1, 2, 3, 4)  
my_t1.append( (5, 6, 7) )  
print(len(my_t1))
```

Question 6Answer



a.

1



b.

5



c.

2



d.

Error

WEEK 7 MCQ

Feedback

Your answer is correct.

The correct answer is:

Error

Question 7

Correct

Mark 1.00 out of 1.00



Flag question

Question text

If $a=(15,16,17,18,19,25)$, then $a[1:-1]$ will be

Note :

$a=(15,16,17,18,19,25)$

`print((a[1:-1]))`

Question 7Answer



a.

$(16,17,18)$



b.

$(25,19,18,17)$



c.

Error



d.

$(16,17,18,19)$

Feedback

Your answer is correct.

The correct answer is:

$(16,17,18,19)$

Question 8

Correct

Mark 1.00 out of 1.00



Flag question

WEEK 7 MCQ

Question text

What will be the output of the below Python code?

```
t1=(55,12,78,64,25)
```

```
t1.pop(12)
```

```
print(tuple1)
```

Question 8Answer



a.

(55,78,64,25)



b.

12



c.

(12)



d.

Error

Feedback

Your answer is correct.

The correct answer is:

Error

Question 9

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Find the output of the given Python program?

```
>>>t = (1, 2, 4, 3, 8, 9)
```

```
>>>[t[i] for i in range(0, len(t), 2)]
```

WEEK 7 MCQ

Question 9Answer

a.

(1, 4, 8)

b.

[1, 2, 4, 3, 8, 9]

c.

[1, 4, 8]

d.

[2, 3, 9]

Feedback

Your answer is correct.

The correct answer is:

[1, 4, 8]

Question 10

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Select which is true for Python tuple?

Question 10Answer

a.

We can change the tuple once created

b.

None of these

c.

A tuple is unordered

d.

WEEK 7 MCQ

A tuple maintains the order of items

[Feedback](#)

Your answer is correct.

The correct answer is: A tuple maintains the order of items

Question 11

Incorrect

Mark 0.00 out of 1.00



[Flag question](#)

[Question text](#)

Select all the correct options to remove "ECE" from the [set](#).

```
sampleSet = {"ECE", "R&A", "MCT"}
```

Question 11Answer



a.

`remove.sampleSet("ECE")`



b.

`del.sampleSet("ECE")`



c.

`sampleSet.discard("ECE")`



d.

`sampleSet.delete("ECE")`

[Feedback](#)

Your answer is incorrect.

The correct answer is:

`sampleSet.discard("ECE")`

Question 12

Correct

Mark 1.00 out of 1.00



[Flag question](#)

WEEK 7 MCQ

Question text

Which of the following is a Python tuple?

Question 12Answer

a.

{1,3,8,9,41}

b.

("Wonder")

c.

[1,2,3,4]

d.

(1,4,5,6,7)

Feedback

Your answer is correct.

The correct answer is:

(1,4,5,6,7)

Question 13

Incorrect

Mark 0.00 out of 1.00

Flag question

Question text

Which of the following options will not result in an error when performed on `tuples` in Python where `tupl=(5,2,7,0,3)`?

Question 13Answer

a.

`tupl.sort()`

b.

`tupl1=tupl+tupl`

c.

WEEK 7 MCQ

tupl.append(2)



d.

tupl[1]=2

[Feedback](#)

Your answer is incorrect.

The correct answer is:

tupl1=tupl+tupl

Question 14

Incorrect

Mark 0.00 out of 1.00



[Flag question](#)

[Question text](#)

Choose the correct option.

Question 14Answer



a.

In Python, a tuple can contain only strings as its elements.



b.

In Python, a tuple can contain only integers as its elements.



c.

In Python, a tuple can contain either string or integer but not both at a time.



d.

In Python, a tuple can contain both integers and strings as its elements.

[Feedback](#)

Your answer is incorrect.

The correct answer is:

In Python, a tuple can contain both integers and strings as its elements.

Question 15

Correct

Mark 1.00 out of 1.00

WEEK 7 MCQ



Flag question

Question text

What is the output of the following

```
set1 = {10, 20, 30, 40, 50}  
set2 = {60, 70, 10, 30, 40, 80, 20, 50}  
  
print(set1.issubset(set2))  
print(set2.issuperset(set1))
```

Question 15 Answer



a.

True

False



b.

False

True



c.

True

True



d.

False

False

Feedback

Your answer is correct.

The correct answer is:

True

True

WEEK 8 MCQ

Started on	Tuesday, 28 May 2024, 9:14 PM
State	Finished
Completed on	Tuesday, 28 May 2024, 9:37 PM
Time taken	23 mins 28 secs
Grade	14.00 out of 15.00 (93.33%)

Question 1

Correct

Mark 1.00 out of 1.00



Flag question

Question text

pop function delete and ____ the element of [dictionary](#).

Question 1 Answer



a.

not return



b.

add



c.

display



d.

return

Feedback

The correct answer is: return

Question 2

Correct

Mark 1.00 out of 1.00



Flag question

Question text

[Dictionary](#) is a ____ data type.

Question 2 Answer



WEEK 8 MCQ

- a.
Ordered
- b.
Mapping
- c.
Sequence
- d.
None of the mentioned

[Feedback](#)

The correct answer is: Mapping

Question 3

Correct

Mark 1.00 out of 1.00



Flag question

Question text

____ datatype fall under mapping.

Question 3Answer



- a.
Dictionary

- b.
String

- c.
List

- d.
Tuple

[Feedback](#)

The correct answer is: Dictionary

Question 4

Correct

WEEK 8 MCQ

Mark 1.00 out of 1.00



Flag question

Question text

Choose the correct statement, in reference to the following code:

D1.update(D2) #D1 and D2 are dictionaries

Question 4Answer



a.

It will merge all the elements of **dictionary 'D2'** in **dictionary 'D1'**.



b.

None of the mentioned



c.

It will merge all the elements of **dictionary 'D1'** in **dictionary 'D2'**.



d.

It will create a new **dictionary**.

Feedback

The correct answer is: It will merge all the elements of **dictionary 'D2'** in **dictionary 'D1'**.

Question 5

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What will be the Output of the following code?

```
dl={1:10, 2:20, 3:30, 4:40}
```

```
d2={5:50, 6:60, 7:70}
```

```
dl.update (d2)
```

```
print (dl)
```

Question 5Answer



WEEK 8 MCQ

- a.
 $\{1:10, 2: 20, 4: 40, 5: 50, 6: 60, 7: 70\}$
-
- b.
 $[(1, 10), (2, 20), (3, 30), (4, 40), (5, 50)]$
-
- c.
 $\{1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60, 7: 70\}$
-
- d.
 $[1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60, 7: 70]$

Feedback

Your answer is correct.

The correct answer is:

$\{1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60, 7: 70\}$

Question 6

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Dictionaries are flexible in nature, means elements can be added or removed from it.

Question 6Answer



a.

True



b.

False

Feedback

The correct answer is: True

Question 7

Correct

Mark 1.00 out of 1.00

WEEK 8 MCQ



Flag question

Question text

Which of the following is an example of **dictionary**?

Question 7Answer



a.

D = { }



b.

L = []



c.

None of the mentioned



d.

C =

Feedback

The correct answer is: D = { }

Question 8

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which function helps to merge **dictionary** 'D1' and 'D2'?

Question 8Answer



a.

get



b.

merge



c.

WEEK 8 MCQ

update



d.

append

[Feedback](#)

The correct answer is: update

Question 9

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

There is no index value in [dictionary](#) like we have in [List](#).(T/F)

Question 9Answer



a.

True



b.

False

[Feedback](#)

The correct answer is: True

Question 10

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

What will be the output of the following Python code snippet?

```
a={}
a['a']=1
a['b']=[2,3,4]
print(a)
```

WEEK 8 MCQ

Question 10Answer



a.

{'b': [2, 3, 4], 'a': 1}



b.

{'b': [2], 'a': 1}



c.

Error



d.

{'b': [2], 'a': [3]}

Feedback

Your answer is correct.

The correct answer is:

{'b': [2, 3, 4], 'a': 1}

Question 11

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Keys in [dictionary](#) are ____.

Question 11Answer



a.

Immutable



b.

antique



c.

integers



WEEK 8 MCQ

d.

Mutable

[Feedback](#)

The correct answer is: Immutable

Question 12

Correct

Mark 1.00 out of 1.00



[Flag question](#)

Question text

1,2,3 are the ____ in the following [dictionary](#). D = {1 : "One", 2 : "Two", 3 : "Three"}

Question 12Answer



a.

None of the mentioned



b.

Values



c.

Keys



d.

Items

[Feedback](#)

The correct answer is: Keys

Question 13

Correct

Mark 1.00 out of 1.00



[Flag question](#)

Question text

Dictionaries in python are ____.

Question 13Answer



a.

WEEK 8 MCQ

Non-Mutable data type



b.

Both Non-Mutable data type and Mapping data type



c.

Mutable data type



d.

Mapping data type

Feedback

The correct answer is: Both Non-Mutable data type and Mapping data type

Question 14

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

Which of the following function create a [dictionary](#) from a sequence of key-value pairs

Question 14Answer



a.

convert



b.

create



c.

[dictionary](#)



d.

dict

Feedback

The correct answer is: dict

WEEK 8 MCQ

Question 15

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which one of the following is correct?

Question 15Answer



a.

A **dictionary** can have two same keys with different values.



b.

A **dictionary** can have two same values with different keys.



c.

A python, a **dictionary** can neither have two same keys nor two same values.



d.

A **dictionary** can have two same keys or same values but cannot have two same key-value pair

Feedback

Your answer is correct.

The correct answer is:

A **dictionary** can have two same values with different keys.

WEEEK 9 MCQ

Started on	Monday, 27 May 2024, 12:42 PM
State	Finished
Completed on	Monday, 27 May 2024, 1:00 PM
Time taken	17 mins 53 secs
Grade	14.00 out of 15.00 (93.33%)

Question 1

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What will be the output of the following Python code?

```
def maximum(x, y):  
    if x > y:  
        return x  
    elif x == y:  
        return 'The numbers are equal'  
    else:  
        return y  
print(maximum(2, 3))
```

Question 1 Answer



a.

2



b.

None of the mentioned



c.

3



d.

The numbers are equal

WEEEK 9 MCQ

[Feedback](#)

Your answer is correct.

The correct answer is:

3

Question 2

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

Which of the following statement is a function call?

Question 2Answer



a.

sum



b.

call sum



c.

def sum



d.

function sum

[Feedback](#)

The correct answer is: sum

Question 3

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

What is the output of the following display() function call?

def display(kwargs):**

for i in kwargs:

WEEEK 9 MCQ

```
print(i)
display(emp="Kelly", salary=9000)
```

Question 3Answer



a.

('emp', 'Kelly')
(‘salary’, 9000)



b.

emp
salary



c.

Kelly
9000



d.

TypeError

Feedback

Your answer is correct.

The correct answer is:

emp
salary

Question 4

Correct

Mark 1.00 out of 1.00



Flag question

Question text

What will be the output of the following Python code?

WEEEK 9 MCQ

```
def test(i,j):
    if(i==0):
        return j
    else:
        return test(i-1,i+j)
print(test(4,7))
```

Question 4Answer



a.

13



b.

7



c.

17



d.

Infinite loop

Feedback

Your answer is correct.

The correct answer is:

17

Question 5

Correct

Mark 1.00 out of 1.00



Flag question

Question text

The return statement in function is used to ____.

Question 5Answer



a.

return value

WEEEK 9 MCQ



b.

Both return value and returns the control to the calling function



c.

returns the control to the calling function



d.

None of the mentioned

Feedback

The correct answer is: Both return value and returns the control to the calling function

Question 6

Correct

Mark 1.00 out of 1.00



Flag question

Question text

A variable that is defined inside any function or a block is known as a ____.

Question 6Answer



a.

inside variable



b.

Function Variable



c.

Local variable



d.

Global variable

Feedback

The correct answer is: Local variable

Question 7

Correct

Mark 1.00 out of 1.00



Flag question

WEEEK 9 MCQ

Question text

A function may return multiple values using ____.

Question 7Answer

a.

List

b.

String

c.

Tuple

d.

Dictionary

Feedback

The correct answer is: Tuple

Question 8

Correct

Mark 1.00 out of 1.00

Flag question

Question text

The part of the program where a variable is accessible is known as the ____ of that variable

Question 8Answer

a.

none of the mentioned

b.

scope

c.

part

d.

module

WEEEK 9 MCQ

Feedback

The correct answer is: scope

Question 9

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following number can never be generated by the following code:
random.randrange(0, 100)

Question 9Answer



a.

1



b.

100



c.

99



d.

0

Feedback

The correct answer is: 100

Question 10

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which one of the following is the correct way of calling a function?

Question 10Answer



a.

ret function_name()



WEEEK 9 MCQ

- b.
call function_name()
- c.
function function_name()
- d.
function_name()

[Feedback](#)

Your answer is correct.

The correct answer is:

function_name()

Question 11

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Fill in the line of the following Python code for calculating the factorial of a number?

```
def factorial    :  
    if (n==1 or n==0):  
        return 1  
    else:  
        return --  
num = 5;  
print("number : ",num)  
print("Factorial : ",factorial(num))
```

Question 11Answer



- a.
(n * factorial(n - 1))
- b.

WEEEK 9 MCQ

fact *fact(n-1)

c.

$(n-1)*(n-2)$

d.

$n*(n-1)$

Feedback

Your answer is correct.

The correct answer is:

$(n * factorial(n - 1))$

Question 12

Correct

Mark 1.00 out of 1.00

Flag question

Question text

The function can be called in the program by writing function name followed by ____.

Question 12Answer

a.

b.

c.

None of the mentioned

d.

{ }

Feedback

The correct answer is:

Question 13

WEEEK 9 MCQ

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

Write the output of : print(max([1, 2, 3, 4], [4, 5, 6], [7]))

Question 13Answer



a.

7



b.

[4, 5, 6]



c.

[1, 2, 3, 4]



d.

[7]

Feedback

The correct answer is: [7]

Question 14

Correct

Mark 1.00 out of 1.00



Flag question

Question text

____ can be defined as a named group of instructions that accomplish a specific task when it is invoked/called.

Question 14Answer



a.

Function



b.

Token



c.

WEEEK 9 MCQ

Operator

d.

Datatype

Feedback

The correct answer is: Function

Question 15

Correct

Mark 1.00 out of 1.00

Flag question

Question text

The process of dividing a computer program into separate independent blocks of code with specific functionalities is known as _____.

Question 15Answer

a.

Programming

b.

Step Programming

c.

Modular Programming

d.

More Programming

Feedback

The correct answer is: Modular Programming

WEEK 10 MCQ

Started on	Monday, 27 May 2024, 1:14 PM
State	Finished
Completed on	Monday, 27 May 2024, 1:23 PM
Time taken	8 mins 55 secs
Grade	14.00 out of 15.00 (93.33%)

Question 1

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

Very slow way of sorting is_____

Question 1 Answer



a.

Insertion sort



b.

Heap sort



c.

Bubble sort



d.

Quick sort

Feedback

Your answer is incorrect.

The correct answer is:

Insertion sort

Question 2

Correct

Mark 1.00 out of 1.00



Flag question

Question text

WEEK 10 MCQ

What is mean by stable sorting algorithm?

Question 2Answer



a.

A sorting algorithm is stable if it doesn't preserver the order of duplicate keys



b.

A sorting algorithm is stable if it preserves the order of duplicate keys



c.

A sorting algorithm is stable if it preserves the order of all keys



d.

A sorting algorithm is stable if it preserves the order of non-duplicate keys

Feedback

Your answer is correct.

The correct answer is:

A sorting algorithm is stable if it preserves the order of duplicate keys

Question 3

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following is not the required condition for a binary search algorithm?

Question 3Answer



a.

Number values should only be present

Number values should only be present



b.

There should be direct access to the middle element in any sublist

WEEK 10 MCQ



C.

There must be a mechanism to delete and/or insert elements in the [list](#)



d.

The [list](#) must be sorted

[Feedback](#)

Your answer is correct.

The correct answer is:

There must be a mechanism to delete and/or insert elements in the [list](#)

Question 4

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

Which of the following is not an in-place sorting algorithm?

Question 4 Answer



a.

Heap sort



b.

Selection sort



c.

Merge sort



d.

Quick sort

[Feedback](#)

Your answer is correct.

The correct answer is:

Merge sort

Question 5

WEEK 10 MCQ

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Given an array arr = {45,77,89,90,94,99,100} and key = 100; What are the mid values(corresponding array elements) generated in the first and second iterations?

Question 5Answer



a.

90 and 100



b.

90 and 99



c.

94 and 99



d.

89 and 94

Feedback

Your answer is correct.

The correct answer is:

90 and 99

Question 6

Correct

Mark 1.00 out of 1.00



Flag question

Question text

_____ explain how an algorithm will perform when the input grows larger.

Question 6Answer



a.

Searching

WEEK 10 MCQ



- b.
Merging



- c.
Complexity



- d.
Sorting

Feedback

Your answer is correct.

The correct answer is:

Complexity

Question 7

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Algorithm design technique used in merge sort algorithm is

Question 7Answer



- a.
Greedy method



- b.
Backtracking



- c.
Divide and conquer



- d.
Dynamic programming

Feedback

Your answer is correct.

WEEK 10 MCQ

The correct answer is:

Divide and conquer

Question **8**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

sort is the simplest sorting algorithm that works by repeatedly swapping the adjacent elements in case they are unordered in n-1 passes.

Question 8Answer



a.

Insertion



b.

Bubble



c.

Selection



d.

Complexity

Feedback

Your answer is correct.

The correct answer is: Bubble

Question **9**

Correct

Mark 1.00 out of 1.00



Flag question

WEEK 10 MCQ

Question text

_____ is putting an element in the appropriate place in a sorted [list](#) yields a larger sorted order [list](#).

Question 9Answer

a.
Extraction

b.
Selection

c.
Distribution

d.
Insertion

Feedback

Your answer is correct.

The correct answer is:

Insertion

Question 10

Correct

Mark 1.00 out of 1.00

Flag question

Question text

The process of placing or rearranging a collection of elements into a particular order is known as

Question 10Answer

a.
Merging

b.

WEEK 10 MCQ

Sorting

c.

Searching

d.

Rearranging

Feedback

Your answer is correct.

The correct answer is: Sorting

Question **11**

Correct

Mark 1.00 out of 1.00

Flag question

Question text

_____ search takes a sorted/ordered [list](#) and divides it in the middle.

Question 11Answer

a.

Binary

b.

Hash

c.

Linear

d.

Both (1) & (3)

Feedback

Your answer is correct.

The correct answer is:

Binary

WEEK 10 MCQ

Question 12

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following is not a limitation of binary search algorithm?

Question 12Answer



a.

Requirement of sorted array is expensive when a lot of insertion and deletions are needed



b.

Binary search algorithm is not efficient when the data elements more than 1500



c.

There must be a mechanism to access middle element directly



d.

Must use a sorted array

Feedback

Your answer is correct.

The correct answer is:

Binary search algorithm is not efficient when the data elements more than 1500

Question 13

Correct

Mark 1.00 out of 1.00



Flag question

Question text

The average case occurs in the linear search algorithm

Question 13Answer



WEEK 10 MCQ

a.

Item is the last element in the array or item is not there at all

b.

When the item is not the array at all

c.

When the item is somewhere in the middle of the array

d.

When the item is the last element in the array

Feedback

Your answer is correct.

The correct answer is:

When the item is somewhere in the middle of the array

Question 14

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Given an array arr = {45,77,89,90,94,99,100} and key = 99; what are the mid values(corresponding array elements) in the first and second levels of recursion?

Question 14Answer

a.

89 and 99

b.

89 and 94

c.

90 and 99

d.

WEEK 10 MCQ

90 and 94

[Feedback](#)

Your answer is correct.

The correct answer is:

90 and 99

Question 15

Correct

Mark 1.00 out of 1.00



[Flag question](#)

[Question text](#)

Finding the location of a given item in a collection of items is called

Question 15Answer



a.

Discovering



b.

Finding



c.

Mining



d.

[Searching](#)

[Feedback](#)

Your answer is correct.

The correct answer is:

Searching

[Dashboard](#) / [My courses](#) / [PSPP/PUP](#) / [Experiments based on Variables, Datatypes in Python](#) / [Week1 Coding](#)

Started on	Thursday, 14 March 2024, 11:15 AM
State	Finished
Completed on	Thursday, 14 March 2024, 5:20 PM
Time taken	6 hours 5 mins
Marks	6.00/6.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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

Sample Input:

10

10.9

Sample Output:

10,<class 'int'>

10.9,<class 'float'>

For example:

Input	Result
10	10,<class 'int'>
10.9	10.9,<class 'float'>

Answer: (penalty regime: 0 %)

```
a=int(input())
b=float(input())
print(a,type(a),sep=', ')
print(round(b,1),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.

Question 2

Correct

Mark 1.00 out of 1.00

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 %)

```
basic_sal=int(input())
dearness_allowance=(40/100)*(basic_sal)
house_rent=(20/100)*(basic_sal)
gross_sal=int(basic_sal+dearness_allowance+house_rent)
print(gross_sal)
```

	Input	Expected	Got	
✓	10000	16000	16000	✓
✓	20000	32000	32000	✓
✓	28000	44800	44800	✓
✓	5000	8000	8000	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

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

Sample Input:

8.00

Sample Output:

2.828

For example:

Input	Result
14.00	3.742

Answer: (penalty regime: 0 %)

```
a=float(input())
b=a**0.5
print(round(b, 3))
```

	Input	Expected	Got	
✓	8.00	2.828	2.828	✓
✓	14.00	3.742	3.742	✓
✓	4.00	2.000	2.0	✓
✓	487	22.068	22.068	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

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

Input Format:

The first line contains the Rs X

The second line contains Rs Y

The third line contains Rs Z

Sample Input:

10000

250

15000

Sample Output:

46.34 is the gain percent.

For example:

Input	Result
45500	30.43 is the gain percent.
500	
60000	

Answer: (penalty regime: 0 %)

```
x=int(input())
y=int(input())
z=int(input())
a=x+y
b=z-a
c=(b/a)*100
print(f'{c:.2f} is the gain percent.')
```

	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.	✓

	Input	Expected	Got	
✓	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 5

Correct

Mark 1.00 out of 1.00

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

Sample Input

10

20

Sample Output

Your total refund will be \$6.00.

For example:

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

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
x=a*0.10
y=b*0.25
z=x+y
print(f'Your total refund will be ${z:.2f}.')
```

	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 6

Correct

Mark 1.00 out of 1.00

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

Hint:

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

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

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

Sample Input:

450

Sample Output:

weekdays 10.38

weekend 0.38

For example:

Input	Result
450	weekdays 10.38 weekend 0.38

Answer: (penalty regime: 0 %)

```
sal=int(input())
weekend_sal=abs((sal-500)/130)
weekday_sal=weekend_sal+10
print('weekdays',f'{weekday_sal:.2f}')
print('weekend',f'{weekend_sal:.2f}')
```

	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	✓

	Input	Expected	Got	
✓	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.

[◀ Week1_Quiz](#)

Jump to...

Go

[Operators ►](#)

Started on Tuesday, 26 March 2024, 9:01 PM**State** Finished**Completed on** Tuesday, 26 March 2024, 10:28 PM**Time taken** 1 hour 27 mins**Marks** 19.00/19.00**Grade** **100.00** out of 100.00**Question 1**

Correct

Mark 10.00 out of 10.00

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

[Sample](#) Input:

10

20

[Sample](#) Output:

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

Answer: (penalty regime: 0 %)

```
num_widget=int(input())
num_gizmos=int(input())
widget_weight=75
gizmos_weight=112
total_weight=(num_widget*widget_weight)+(num_gizmos*gizmos_weight)
print('The total weight of all these widgets and gizmos is',total_weight,'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.	✓

Passed all tests! ✓

Correct

Marks for this submission: 10.00/10.00.

Question 2

Correct

Mark 1.00 out of 1.00

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

Hint:

Use ASCII values of C and D.

Input Format:An integer x, $0 \leq x \leq 1$.**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

For example:

Input	Result
0	C

Answer: (penalty regime: 0 %)

```
x=int(input())
print(chr(67+x))
```

	Input	Expected	Got	
✓	0	C	C	✓

	Input	Expected	Got	
✓	1	0	0	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

Write a program 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	7

Answer: (penalty regime: 0 %)

```
num=abs(int(input()))
last_digit=num%10
print(last_digit)
```

	Input	Expected	Got	
✓	197	7	7	✓
✓	-197	7	7	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Note:

Dont 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	False
40	

Answer: (penalty regime: 0 %)

```
age=int(input())
weight=int(input())
print(age>=18 and weight>40)
```

	Input	Expected	Got	
✓	19 45	True	True	✓

	Input	Expected	Got	
✓	18 40	False	False	✓
✓	18 42	True	True	✓
✓	16 45	False	False	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

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.

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 %)

```
deposit_amount=float(input())
balance_year_1=deposit_amount*1.04
balance_year_2=balance_year_1*1.04
balance_year_3=balance_year_2*1.04
print('Balance as of end of Year 1: {:.2f}'.format(balance_year_1))
print('Balance as of end of Year 2: {:.2f}'.format(balance_year_2))
print('Balance as of end of Year 3: {:.2f}'.format(balance_year_3))
```

	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 6

Correct

Mark 1.00 out of 1.00

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 %)

```
meal_cost=float(input())
tax_rate=0.05
tip_rate=0.18
tax_amount=meal_cost*tax_rate
tip_amount=meal_cost*tip_rate
total_amount=(meal_cost+tax_amount+tip_amount)
print('The tax is {:.2f} and the tip is {:.2f}, making the total {:.2f}'.format(tax_amount,tip_amount,total_amount))
```

	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	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 7

Correct

Mark 1.00 out of 1.00

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 %)

```
num=int(input())
if 0<= num<=15:
    count=0
    while num>0:
        count+=num&1
        num>>=1
    print(count)
```

	Input	Expected	Got	
✓	3	2	2	✓
✓	5	2	2	✓
✓	15	4	4	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 1.00 out of 1.00

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

Input Given:

N-No of friends

P1,P2,P3 AND P4-No of chocolates

OUTPUT:

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

SAMPLE INPUT AND OUTPUT:

5

25

12

10

9

OUTPUT

True False True False

For example:

Input	Result
5	True False True True
25	
23	
20	
10	

Answer: (penalty regime: 0 %)

```
N=int(input())
P1=int(input())
P2=int(input())
P3=int(input())
P4=int(input())
print(P1%N==0, P2%N==0, P3%N==0, P4%N==0)
```

	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	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 9

Correct

Mark 1.00 out of 1.00

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

Input format:

Line 1 has the total number of weapons

Line 2 has the total number of Soldiers.

Output Format:

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

Sample Input:

32

43

Sample Output:

False

For example:

Input	Result
32	False
43	

Answer: (penalty regime: 0 %)

```
weapons=int(input())
soldiers=int(input())
print(weapons % 3==0 and soldiers %2==0)
```

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

	Input	Expected	Got	
✓	6789 32996	True	True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

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

IF Lokpaul wins print true, otherwise false.

Sample Input

10

Sample Output

True

Explanation:

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

For example:

Input	Result
101	False

Answer: (penalty regime: 0 %)

```
num=int(input())
if num%2==0 and 0<num<=100:
    print('True')
else:
    print('False')
```

	Input	Expected	Got	
✓	56	True	True	✓
✓	101	False	False	✓
✓	-1	False	False	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Week2_MCQ](#)

[Selection control structures ►](#)

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Started on	Wednesday, 27 March 2024, 11:18 PM
State	Finished
Completed on	Thursday, 28 March 2024, 8:59 PM
Time taken	21 hours 40 mins
Marks	10.00/10.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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 $3^2 + 4^2 = 25 = 5^2$

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

Answer: (penalty regime: 0 %)

```
a= int(input())
b=int(input())
c=int(input())
if a*a+b*b==c*c or a*a+c*c==b*b or b*b+c*c==a*a:
    print("yes")
else:
    print("no")
```

	Input	Expected	Got	
✓	3 5 4	yes	yes	✓
✓	5 8 2	no	no	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

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

Sample Input 1

i

Sample Output 1

It's a vowel.

Sample Input 2

y

Sample Output 2

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

Sample Input3

c

Sample Output 3

It's a consonant.

For example:

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

Answer: (penalty regime: 0 %)

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

	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.	✓

	Input	Expected	Got	
✓	r	It's a consonant.	It's a consonant.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

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.

Answer: (penalty regime: 0 %)

```
year=int(input())
x=year%12
if x ==0:
    animal ='Monkey'
elif x==1:
    animal='Rooster'
elif x==2:
    animal='Dog'
elif x==3:
    animal='Pig'
elif x==4:
    animal='Rat'
elif x==5:
    animal='Ox'
elif x==6:
    animal='Tiger'
elif x ==7:
    animal='Hare'
```

	Input	Expected	Got	
✓	2010	2010 is the year of the Tiger.	2010 is the year of the Tiger.	✓

	Input	Expected	Got	
✓	2020	2020 is the year of the Rat.	2020 is the year of the Rat.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Write a program that returns the second last digit of the given number. Second last digit is being referred to the 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

Answer: (penalty regime: 0 %)

```
number=int(input())
number=abs(number)
number_str=str(number)
if len(number_str) < 2:
    second_last_digit= -1
else:
    second_last_digit=int(number_str[-2])
print(second_last_digit)
```

	Input	Expected	Got	
✓	197	9	9	✓
✓	-197	9	9	✓
✓	5	-1	-1	✓
✓	123456	5	5	✓
✓	8	-1	-1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

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

Marks in Maths \geq 65

Marks in Physics \geq 55

Marks in Chemistry \geq 50

Or

Total in all three subjects \geq 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	The candidate is eligible
60	
80	

Answer: (penalty regime: 0 %)

```
maths_mark=int(input())
physics_mark=int(input())
chemistry_mark=int(input())
total_marks=maths_mark+physics_mark+chemistry_mark
if (maths_mark>=65 and physics_mark>=55 and chemistry_mark>=50) or (total_marks>=180):
    print('The candidate is eligible')
else:
    print('The candidate is not eligible')
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 6

Correct

Mark 1.00 out of 1.00

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

Answer: (penalty regime: 0 %)

```
units=float(input())
if units<= 199:
    bill = units*1.20
elif units<400:
    bill=units*1.50
elif units<600:
    bill= units*1.80
else:
    bill=units*2.00
if bill>400:
    bill+=bill*0.15
if bill<100:
    bill=100
print(bill)
```

	Input	Expected	Got	
✓	50	100.00	100	✓
✓	100.00	120.00	120.0	✓
✓	500	1035.00	1035.0	✓
✓	700	1610.00	1610.0	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 7

Correct

Mark 1.00 out of 1.00

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 %)

```
a=int(input())
b=int(input())
c=int(input())
if a==b and b==c:
    print("That's a equilateral triangle")
elif a==b or b==c or a==c:
    print("That's a isosceles triangle")
else:
    print("That's a scalene triangle ")
```

	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 triangle	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 1.00 out of 1.00

IN / OUT

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

Input Format:

Input consists of 2 integers.

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

Output Format:

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

Sample Input and Output:

Input

8

3

Output

OUT

For example:

Input	Result
8	OUT
3	

Answer: (penalty regime: 0 %)

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 9

Correct

Mark 1.00 out of 1.00

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=input()
if month=='January' or month=='March' or month=='May' or month=='July' or month=='August' or
month=='October' or month=='December':
    days="31"
elif month=="April" or month=='June' or month=='September' or month=='November':
    days='30'
elif month=='February':
    days="28 or 29"
else:
    days=None
if days:
    print(f'{month} has {days} days in it.')
else:
    print("Please enter a valid month name.")
```

	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 10

Correct

Mark 1.00 out of 1.00

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 % 400==0:
    print(f'{year} is a leap year.')
elif year % 100==0:
    print(f'{year} is not a leap year.')
elif year % 4==0:
    print(f'{year} is a leap year.')
else:
    print(f'{year} is not 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.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Week3_mcq](#)

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Started on	Wednesday, 3 April 2024, 7:50 PM
State	Finished
Completed on	Wednesday, 10 April 2024, 8:10 AM
Time taken	6 days 12 hours
Overdue	4 days 12 hours
Marks	10.00/10.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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,

$$5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$$

$$4! = 4 \times 3 \times 2 \times 1 = 24$$

$$9! = 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 362880$$

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 %)

```
n=int(input())
factorial=1
for i in range(1,n+1):
    factorial*=i
print(factorial)
```

	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 2

Correct

Mark 1.00 out of 1.00

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 %)

```
N=int(input())
unique_digit_count=0
for digit_to_check in range(10):
    has_digit=False
    temp_N=N
    while temp_N>0:
        if temp_N%10==digit_to_check:
            has_digit=True
            break
        temp_N//=10
    if has_digit:
        unique_digit_count+=1
print(unique_digit_count)
```

	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 3

Correct

Mark 1.00 out of 1.00

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: $2 \leq N \leq 5000$, 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 %)

```
n=int(input())
is_prime=True
if n%2==0 and n>2:
    is_prime=False
else:
    for i in range(3,int(n**0.5)+1,2):
        if n%i==0:
            is_prime=False
            break
print(2 if is_prime else 1)
```

	Input	Expected	Got	
✓	7	2	2	✓
✓	10	1	1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Write a program 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 %)

```
n=int(input())
sum =0
term=1
count=1
while count<= n:
    sum+=term
    term=term*10+1
    count+=1
print(sum)
```

	Input	Expected	Got	
✓	4	1234	1234	✓
✓	6	123456	123456	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

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 %)

```
N=int(input())
number=N
if number<10:
    print('Yes')
else:
    while number%2==0:
        number//=2
    while number%3==0:
        number//=3
    while number%5==0:
        number//=5
    while number%7==0:
        number//=7
    if number==1:
        print('Yes')
    else:
        print('No')
```

	Input	Expected	Got	
✓	14	Yes	Yes	✓
✓	13	No	No	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 6

Correct

Mark 1.00 out of 1.00

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 %)

```
number=int(input())
n=number
num_digits=0
while n>0:
    n/=10
    num_digits+=1
sum_of_powers=0
n=number
while n>0:
    digit=n%10
    sum_of_powers+=digit**num_digits
    num_digits-=1
    n/=10
if sum_of_powers==number:
    print('Yes')
else:
    print('No')
```

	Input	Expected	Got	
✓	175	Yes	Yes	✓
✓	123	No	No	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 7**Correct**

Mark 1.00 out of 1.00

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 %)

```
n=int(input())
next_perfect_square=0
candidate=0
while next_perfect_square<=n:
    candidate+=1
    next_perfect_square=candidate*candidate
print(next_perfect_square)
```

	Input	Expected	Got	
✓	10	16	16	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 1.00 out of 1.00

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 %)

```
n=int(input())
a,b=0,1
if n==1:
    nth_number=a
elif n==2:
    nth_number=b
else:
    for _ in range(2,n):
        nth_number=a+b
        a,b=b,nth_number
print(nth_number)
```

	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

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 %)

```
N=int(input())
non_repeated_count=0
digit_occurrences=[0]*10
temp_N=N
while temp_N>0:
    digit=temp_N%10
    digit_occurrences[digit]+=1
    temp_N/=10
temp_N=N
while temp_N>0:
    digit=temp_N%10
    if digit_occurrences[digit]==1:
        digit_occurrences[digit]=-1
        non_repeated_count+=1
    temp_N/=10
print(non_repeated_count)
```

	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 10

Correct

Mark 1.00 out of 1.00

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 %)

```
n=int(input())
n+=1
square_root=0
while square_root*square_root<n:
    square_root+=1
if square_root*square_root==n:
    print('Yes')
else:
    print('No')
```

	Input	Expected	Got	
✓	24	Yes	Yes	✓
✓	26	No	No	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ Week4_mcq

[Strings ►](#)

Started on Thursday, 25 April 2024, 6:58 PM

State Finished

Completed on Monday, 6 May 2024, 1:56 PM

Time taken 10 days 18 hours

Overdue 8 days 18 hours

Marks 10.00/10.00

Grade **100.00** out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Assume that the given string has enough memory.

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

Sample Input 1

a2b4c6

Sample Output 1

aabbccccc

Answer: (penalty regime: 0 %)

```
input_string=input()
output_string=''
i=0
while i<len(input_string):
    char=input_string[i]
    i+=1
    number=0
    while i < len(input_string) and input_string[i].isdigit():
        number=number*10 + int(input_string[i])
        i+=1
    output_string +=char*number
print(output_string)
```

	Input	Expected	Got	
✓	a2b4c6	aabbccccc	aabbccccc	✓
✓	a12b3d4	aaaaaaaaaaabbbddd	aaaaaaaaaaabbbddd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

Write a program to 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	True
PYNATIVE	

Answer: (penalty regime: 0 %)

```
s1=input()
s2=input()
is_balanced=True
for char in s1:
    if char not in s2:
        is_balanced=False
        break
print("True" if is_balanced else "False")
```

	Input	Expected	Got	
✓	Yn PYNATIVE	True	True	✓
✓	Ynf PYNATIVE	False	False	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

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 %)

```
text=input().lower()

words=text.split()

non_palindromes=[]

for word in words:
    if word!=word[::-1]:
        non_palindromes.append(word)

print(' '.join(non_palindromes))
```

	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.

Question 4

Correct

Mark 1.00 out of 1.00

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 %)

```
sentence=input()
words=sentence.split()
if len(words)<2:
    result='LESS'
else:
    result=words[1].upper()
print(result)
```

	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 5

Correct

Mark 1.00 out of 1.00

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 %)

```
input_string=input()
count_letters=0
count_digits=0
count_special=0
for char in input_string:
    if char.isdigit():
        count_digits+=1
    elif char.isalpha():
        count_letters+=1
    else:
        count_special+=1
print(count_letters)
print(count_digits)
print(count_special)
```

	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 6

Correct

Mark 1.00 out of 1.00

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:

$2 \leq N \leq 10$

$2 \leq \text{Length of } S1, S2 \leq 1000$

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 %)

```
s1=input()
s2=input()
n=int(input())
unique_chars=''
found_chars=''
for char in s1:
    if char in s2 and char not in found_chars:
        unique_chars+=char
        found_chars+=char
    if len(unique_chars)==n:
        break
print(unique_chars)
```

	Input	Expected	Got	
✓	abcbde cdefghbb 3	bcd	bcd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 7

Correct

Mark 1.00 out of 1.00

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 %)

```
s=input()
letters=[c for c in s if c.isalpha()]
letters.reverse()
it=iter(letters)
result=''.join(next(it)if c.isalpha()else c for c in s)
print(result)
```

	Input	Expected	Got	
✓	A&B	B&A	B&A	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 1.00 out of 1.00

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 %)

```
s1=input()  
s2=input()  
result=''  
for char in s1:  
    if char not in s2:  
        result+=char  
print(result)
```

	Input	Expected	Got	
✓	experience enc	xpri	xpri	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 9

Correct

Mark 1.00 out of 1.00

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:

$1 \leq \text{Length of } S \leq 100$

Example Input/Output 1:

Input:

abcd@gmail.com

Output:

com

gmail

abcd

Answer: (penalty regime: 0 %)

```
# Get user input for the string S
S = input()

#Split the input string to extract USERNAME,DOMAIN and EXTENSION
username,domain_extension= S.split('@')
domain,extension = domain_extension.split('. ',1)

#print EXTENSION ,DOMAIN AND USERNAME in reverse order
print(extension)
print(domain)
print(username)
```

	Input	Expected	Got	
✓	abcd@gmail.com	com gmail abcd	com gmail abcd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

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 %)

```
b=' '
try:
    while True:
        a=input()
        if a not in b:
            print(a)
            b+=a
except:
    pass
```

	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! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Week5_MCQ](#)[List ►](#)

[Dashboard](#) / [My courses](#) / [PSPP/PUP](#) / [Experiments based on Lists and its operations.](#) / [Week6_Coding](#)

Started on Tuesday, 21 May 2024, 8:48 AM

State Finished

Completed on Thursday, 23 May 2024, 7:01 AM

Time taken 1 day 22 hours

Marks 10.00/10.00

Grade **100.00** out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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 %)

```

1 sorted_array=[]
2 for _ in range(10):
3     sorted_array.append(int(input()))
4 item_to_insert=int(input())
5 print(f"ITEM to be inserted:{item_to_insert}")
6 position=0
7 while position<len(sorted_array)and sorted_array[position]<item_to_insert:
8     position+=1
9 sorted_array.insert(position,item_to_insert)
10 print("After insertion array is:")
11 for elememt in sorted_array:
12     print(elememt)

```

	Input	Expected	Got	
✓	1 3 4 5 6 7 8 9 10 11 2 9 10 11	ITEM to be inserted:2 After insertion array is: 1 2 3 4 5 6 7 8 9 10 11	ITEM to be inserted:2 After insertion array is: 1 2 3 4 5 6 7 8 9 10 11	✓
✓	11 22 33 55 66 77 88 99 110 120 44 110 120	ITEM to be inserted:44 After insertion array is: 11 22 33 44 55 66 77 88 99 110 120	ITEM to be inserted:44 After insertion array is: 11 22 33 44 55 66 77 88 99 110 120	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

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

Input Format:

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

Second line take n Integers which is inputs of array.

Output Format:

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

Example Input:

```
5
1
2
2
3
4
```

Output:

```
1 2 3 4
```

Example Input:

```
6
1
1
2
2
3
3
```

Output:

```
1 2 3
```

For example:

Input	Result
5 1 2 2 3 4	1 2 3 4
6 1 1 2 2 3 3	1 2 3

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 elements=[]
3 for _ in range(n):
4     elements.append(int(input()))
5 distinct_elements=set(elements)
6 print(" ".join(map(str,sorted(distinct_elements))))
```

--	--	--	--	--

	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 3

Correct

Mark 1.00 out of 1.00

Determine the factors of a number (i.e., all positive integer values that evenly divide into a number) and then return the p^{th} element of the [list](#), sorted ascending. If there is no p^{th} 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 $1 \leq n \leq 10^{15}$ $1 \leq p \leq 10^9$

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 $p = 3^{\text{rd}}$ 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 $p = 1^{\text{st}}$ factor of 1 is returned as the answer.

For example:

Input	Result
10	5
3	
10	0
5	
1	1
1	

Answer: (penalty regime: 0 %)

```

1 n=int(input())
2 p=int(input())
3 factors=set()
4 for i in range(1,int(n**0.5)+1):
5     if n%i==0:
6         factors.add(i)
7         factors.add(n//i)

```

```
    sorted_factors=sorted(factors)
8  if p<len(sorted_factors):
9      print(sorted_factors[p-1])
10 else:
11     print(0)
12 
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

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

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 %)

```
1 T=int(input())
2 results=[]
3 for _ in range(T):
4     N=int(input())
5     A=[]
6     for _ in range(N):
7         A.append(int(input()))
8     k=int(input())
9     found=False
10    start=0
11    end=1
12    while end<N:
13        if start == end:
14            end+=1
15        elif A[end]-A[start]==k:
16            results.append(1)
17
18 print(results)
```

```
10     results.append(1)
11     found=True
12     break
13 elif A[end]-A[start]<k:
14     end+=1
15 else:
16     start+=1
17 if not found:
18     results.append(0)
19 for result in results:
20     print(result)
```

	Input	Expected	Got	
✓	1 3 1 3 5 4	1	1	✓
✓	1 3 1 3 5 99	0	0	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

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

- $3 \leq n \leq 10^5$
- $1 \leq arr[i] \leq 2 \times 10^4$, 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	2
1	
2	
3	
3	

Input	Result
3	1
1	
2	
1	

Answer: (penalty regime: 0 %)

```

1 n=int(input())
2 arr=[]
3 for _ in range(n):
4     arr.append(int(input()))
5 total_sum=sum(arr)
6 left_sum=0
7 pivot_index=-1
8 for i in range(n):
9     right_sum=total_sum-left_sum-arr[i]
10 if left_sum==right_sum:
11     pivot_index=i
12     left_sum+=arr[i]
13 print(pivot_index)

```

	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 6

Correct

Mark 1.00 out of 1.00

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 %)

```

1 m=int(input())
2 n=int(input())
3 list1=[]
4 for _ in range(m):
5     row=[int(input()) for _ in range(n)]
6     list1.append(row)
7 list2=[]
8 for _ in range(m):
9     row=[int(input()) for _ in range(n) ]
10    list2.append(row)
11 zipped_list=[]
12 for i in range(m):
13     combined_row=list1[i]+list2[i]
14     zipped_list.append(combined_row)
15 print(zipped_list)

```

	Input	Expected	Got	
✓	2 2 1 2 3 4 5 6 7 8	<code>[[1, 2, 5, 6], [3, 4, 7, 8]]</code>	<code>[[1, 2, 5, 6], [3, 4, 7, 8]]</code>	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 7

Correct

Mark 1.00 out of 1.00

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 %)

```
1 n1=int(input())
2 array1=[]
3 for _ in range(n1):
4     element=int(input())
5     array1.append(element)
6 n2=int(input())
7 array2=[]
8 for _ in range(n2):
9     element=int(input())
10    array2.append(element)
11 merged_array=list(set(array1+array2))
12 merged_array.sort()
13 print(' '.join(map(str,merged_array)))
```

	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	✓

	Input	Expected	Got	
✓	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 8

Correct

Mark 1.00 out of 1.00

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 %)

```
1 n=int(input())
2 elements=[]
3 for _ in range(n):
4     elements.append(int(input()))
5 search_element=int(input())
6 count=0
7 locations=[]
8 for index,element in enumerate(elements):
9     if element==search_element:
10         locations.append(index+1)
11         count+=1
12 if count>0:
13     for location in locations:
14         print(f"{search_element} is present at location {location}.")
15     print(f"{search_element} is present {count} times in the array.")
16 else:
17     print(f"{search_element} is not present in the array.")
```

	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 9

Correct

Mark 1.00 out of 1.00

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 %)

```
1 def is_strictly_increasing(lst):
2     return all(lst[i]<lst[i+1]for i in range(len(lst)-1))
3 def can_remove_one_and_increase(lst):
4     for i in range(len(lst)):
5         temp=lst[:i]+lst[i+1:]
6         if is_strictly_increasing(temp):
7             return True
8     return False
9 lst=input()
10 print(can_remove_one_and_increase(lst))
```

	Input	Expected	Got	
✓	7 1 2 3 0 4 5 6	True	True	✓
✓	4 2 1 0 -1	True	True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

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 %)

```
1 n=int(input())
2 elements=[]
3 for _ in range(n):
4     elements.append(int(input()))
5 processed=[]
6 for element in elements:
7     if element not in processed:
8         count=elements.count(element)
9         print(f"{element} occurs {count} times")
10        processed.append(element)
```

	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.

[◀ Week6_MCQ](#)

[Jump to...](#)[Tuples ►](#)

[Dashboard](#) / [My courses](#) / [PSPP/PUP](#) / [Experiments based on Tuples, Sets and its operations](#) / [Week7 Coding](#)

Started on Sunday, 26 May 2024, 9:34 PM

State Finished

Completed on Sunday, 26 May 2024, 11:13 PM

Time taken 1 hour 38 mins

Marks 5.00/5.00

Grade **100.00** out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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 %)

```

1 t = tuple(map(int, input().split(',')))
2 K = int(input())
3 pair_counts = {}
4 for i in range(len(t)):
5     for j in range(i + 1, len(t)):
6         pair_sum = t[i] + t[j]
7         if pair_sum == K:
8             pair_counts[(min(t[i], t[j]), max(t[i], t[j]))] = pair_counts.get(pair_sum, 0) + 1
9
10 distinct_pairs_count = len(pair_counts)
11 print(distinct_pairs_count)

```

	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 2

Correct

Mark 1.00 out of 1.00

Given an array of integers `nums` containing $n + 1$ integers where each integer is in the range $[1, n]$ inclusive. There is only **one repeated number** in `nums`, return *this repeated number*. Solve the problem using [set](#).

Example 1:**Input:** `nums = [1,3,4,2,2]`**Output:** 2**Example 2:****Input:** `nums = [3,1,3,4,2]`**Output:** 3**For example:**

Input	Result
1 3 4 4 2	4

Answer: (penalty regime: 0 %)

```

1 | def findDuplicate(nums):
2 |     seen = set()
3 |     for num in nums:
4 |         if num in seen:
5 |             return num
6 |         seen.add(num)
7 | nums = list(map(int, input().split()))
8 | print(findDuplicate(nums))
9 |

```

	Input	Expected	Got	
✓	1 3 4 4 2	4	4	✓
✓	1 2 2 3 4 5 6 7	2	2	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

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 = "AAAAACCCCCAAAAACCCCCAAAAAGGGTTT"
Output: ["AAAAACCCCC", "CCCCCAAAAA"]

Example 2:

Input: s = "AAAAAAAAAAAAAA"
Output: ["AAAAAAAAAA"]

For example:

Input	Result
AAAAACCCCCAAAAACCCCCAAAAAGGGTTT	AAAAACCCCC CCCCCAAAAA

Answer: (penalty regime: 0 %)

```

1 | s = input().strip()
2 | sequence_length = 10
3 | seen_sequences = set()
4 | duplicate_sequences = set()
5 | for i in range(len(s) - sequence_length + 1):
6 |     current_sequence = s[i:i + sequence_length]
7 |     if current_sequence in seen_sequences:
8 |         duplicate_sequences.add(current_sequence)
9 |     else:
10 |         seen_sequences.add(current_sequence)
11 |
12 | result = list(duplicate_sequences)
13 | for seq in result:
14 |     print(seq)

```

	Input	Expected	Got	
✓	AAAAACCCCCAAAAACCCCCAAAAAGGGTTT	AAAAACCCCC CCCCCAAAAA	AAAAACCCCC CCCCCAAAAA	✓
✓	AAAAAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Write a program 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 5 10
1 2 8 6 5	3
2 6 8 10	

Answer: (penalty regime: 0 %)

```
1 array1_size, array2_size = map(int, input().split())
2 array1 = list(map(int, input().split()))
3 array2 = list(map(int, input().split()))
4 set1 = set(array1)
5 set2 = set(array2)
6 non_repeating = set1.symmetric_difference(set2)
7 for element in non_repeating:
8     print(element, end=" ")
9 print()
10 print(len(non_repeating))
```

	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	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Coders here is a simple task for you, Given string str. Your task is to check whether it is a binary string or not by using python [set](#).

Examples:

Input: str = "01010101010"

Output: Yes

Input: str = "REC101"

Output: No

For example:

Input	Result
01010101010	Yes
010101 10101	No

Answer: (penalty regime: 0 %)

```

1 input_str = input()
2 # Create a set of characters from the input string
3 unique_chars = set(input_str)
4 # Define a set containing only '0' and '1'
5 binary_chars = {'0', '1'}
6 # Check if the set of unique characters is a subset of binary characters
7 result = "Yes" if unique_chars <= binary_chars else "No"
8 # Print the result
9 print(result)
10

```

	Input	Expected	Got	
✓	01010101010	Yes	Yes ✓	
✓	REC123	No	No ✓	
✓	010101 10101	No	No ✓	

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ Week7_MCQ

Jump to...

Dictionary ►

[Dashboard](#) / [My courses](#) / [PSPP/PUP](#) / [Experiments based on Dictionary and its operations.](#) / [Week8 Coding](#)

Started on Tuesday, 28 May 2024, 7:57 PM

State Finished

Completed on Wednesday, 29 May 2024, 6:50 PM

Time taken 22 hours 52 mins

Marks 5.00/5.00

Grade **100.00** out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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

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

Example 1:

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

Output: ["sweet", "sour"]

Example 2:

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

Output: ["banana"]

Constraints:

$1 \leq s1.length, s2.length \leq 200$

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	sweet sour
this apple is sour	

Answer: (penalty regime: 0 %)

```

1 | s1=input().split()
2 | s2=input().split()
3 | s1.extend(s2)
4 | c=[]
5 | a=[]
6 v for i in s1:
7 v     if(s1.count(i)==1):
8         print(i,end=' ')

```

	Input	Expected	Got	
✓	this apple is sweet this apple is sour	sweet sour	sweet sour	✓
✓	apple apple banana	banana	banana	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

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

Points Letters

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

2 D and G

3 B, C, M and P

4 F, H, V, W and Y

5 K

8 J and X

10 Q and Z

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

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

[Sample](#) Input

REC

[Sample](#) Output

REC is worth 5 points.

For example:

Input	Result
REC	REC is worth 5 points.

Answer: (penalty regime: 0 %)

```

1 def scrabble_score(word):
2
3     letter_points = {
4         'A': 1, 'E': 1, 'I': 1, 'L': 1, 'N': 1, 'O': 1, 'R': 1, 'S': 1, 'T': 1, 'U': 1,
5         'D': 2, 'G': 2,
6         'B': 3, 'C': 3, 'M': 3, 'P': 3,
7         'F': 4, 'H': 4, 'V': 4, 'W': 4, 'Y': 4,
8         'K': 5,
9         'J': 8, 'X': 8,
10        'Q': 10, 'Z': 10
11    }
12
13    score = sum(letter_points.get(letter.upper(), 0) for letter in word)
14
15    return score
16
17
18 word = input()
19 score = scrabble_score(word)
20 print(f"{word} is worth {score} points.")
21

```

	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 3

Correct

Mark 1.00 out of 1.00

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 has the highest Assignment marks
- 3.Identify the student with the Lowest lab marks
- 4.Identify the student with the lowest average score

Note:

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

Sample input:

```
4
James 67 89 56
Lalith 89 45 45
Ram 89 89 89
Sita 70 70 70
```

Sample Output:

```
Ram
James Ram
Lalith
Lalith
```

For example:

Input	Result
4	Ram
James 67 89 56	James Ram
Lalith 89 45 45	Lalith
Ram 89 89 89	Lalith
Sita 70 70 70	

Answer: (penalty regime: 0 %)

```
1 n = int(input())
2 d = {}
3 sc = []
4 am = []
5 lm = []
6 for i in range(n):
7     x = input().split()
8     d[x[0]] = [int(x[1]),int(x[2]),int(x[3])]
9     sc.append(sum(d[x[0]])//3)
10    am.append(int(x[2]))
11    lm.append(int(x[3]))
12 a1 = []
13 a2 = []
14 a3 = []
15 a4 = []
16 k = list(d.keys())
17 for i in range(len(k)):
18     if(sc[i] == max(sc)):
19         a1.append(k[i])
20
21 for i in range(len(k)):
22     if(am[i] == max(am)):
23         a2.append(k[i])
24
25 for i in range(len(k)):
26     if(lm[i] == min(lm)):
27         a3.append(k[i])
28
```

```

29 for i in range(len(k)):
30     if(sc[i] == min(sc)):
31         a4.append(k[i])
32 a1.sort()
33 a2.sort()
34 a3.sort()
35 a4.sort()
36 for i in a1:
37     print(i,end = " ")
38 print(" ")
39 for i in a2:
40     print(i,end = " ")
41 print(" ")
42 for i in a3:
43     print(i,end = " ")
44 print(" ")
45 for i in a4:
46     print(i,end = " ")
47 print(" ")

```

	Input	Expected	Got	
✓	4 James 67 89 56 Lalith 89 45 45 Ram 89 89 89 Sita 70 70 70	Ram James Ram Lalith Lalith	Ram James Ram Lalith Lalith	✓
✓	3 Raja 95 67 90 Aarav 89 90 90 Shadhana 95 95 91	Shadhana Shadhana Aarav Raja Raja	Shadhana Shadhana Aarav Raja Raja	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

//

Question 4

Correct

Mark 1.00 out of 1.00

Give a [dictionary](#) with value lists, sort the keys by summation of values in value [list](#).

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

Output : {'Gfg': 17, 'best': 18}

Explanation : Sorted by sum, and replaced.

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

Output : {'best': 10, 'Gfg': 16}

Explanation : Sorted by sum, and replaced.

Sample Input:

2

Gfg 6 7 4

Best 7 6 5

Sample Output

Gfg 17

Best 18

For example:

Input	Result
2	Gfg 17
Gfg 6 7 4	Best 18
Best 7 6 5	

Answer: (penalty regime: 0 %)

```

1 n = int(input())
2 d = {}
3 b = []
4 for i in range(n):
5     x = input().split()
6     s = ""
7     l = []
8     for j in x:
9         if(j.isalpha()):
10             s=s+j
11         else:
12             l.append(int(j))
13     d[s] = sum(l)
14     b.append(sum(l))
15 m = list(d.values())
16 m.sort()
17 k = list(d.keys())
18
19
20 for i in range(len(m)):
21     print(k[b.index(m[i])],m[i])

```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

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

Examples:

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 %)

```

1 n = int(input().strip())
2
3 vote_count = {}
4
5 for _ in range(n):
6     candidate = input().strip()
7     if candidate in vote_count:
8         vote_count[candidate] += 1
9     else:
10        vote_count[candidate] = 1
11
12 max_votes = 0
13 winner = ""
14
15 for candidate, votes in vote_count.items():
16     if votes > max_votes or (votes == max_votes and candidate < winner):
17         max_votes = votes
18         winner = candidate

```

```
19  
20 print(winner)
```

	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.

[◀ Week8_MCQ](#)

Jump to...

Functions ►

[Dashboard](#) / [My courses](#) / [PSPP/PUP](#) / [Functions: Built-in functions, User-defined functions, Recursive functions](#) / [Week9 Coding](#)

Started on	Monday, 27 May 2024, 11:28 AM
State	Finished
Completed on	Monday, 27 May 2024, 1:47 PM
Time taken	2 hours 18 mins
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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

Answer: (penalty regime: 0 %)

Reset answer

```

1 def abundant(num):
2
3     divisor_sum = sum([i for i in range(1, num) if num % i == 0])
4
5     if divisor_sum > num:
6         return "Yes"
7     else:
8         return "No"
9

```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

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 %)

Reset answer

```

1 def differenceSum(n):
2     N=str(n)
3     b=c=0
4     for i in range(len(N)):
5         if i % 2==0:
6             b+=int(N[i])
7         else:
8             c+=int(N[i])
9     if b-c>=0:
10        a=b-c
11    else:
12        a=c-b
13    return a
14
15

```

	Test	Expected	Got	
✓	print(differenceSum(1453))	1	1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

An automorphic number is a number whose square ends with the number itself.

For example, 5 is an automorphic number because $5 \times 5 = 25$. The last digit is 5 which same as the given number.

If the number is not valid, it should display "Invalid input".

If it is an automorphic number display "Automorphic" else display "Not Automorphic".

Input Format:

Take a Integer from Stdin Output Format: Print Automorphic if given number is Automorphic number, otherwise Not Automorphic Example input: 5 Output: Automorphic Example input: 25 Output: Automorphic Example input: 7 Output: Not Automorphic

For example:

Test	Result
print(automorphic(5))	Automorphic

Answer: (penalty regime: 0 %)

[Reset answer](#)

```

1 def automorphic(n):
2     square = n** 2
3     if str(square).endswith(str(n)):
4         return "Automorphic"
5     else:
6         return "Not Automorphic"
7

```

	Test	Expected	Got	
✓	print(automorphic(5))	Automorphic	Automorphic	✓
✓	print(automorphic(7))	Not Automorphic	Not Automorphic	✓

Passed all tests! ✓

[Correct](#)

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

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

$1 \leq \text{orderValue} < 10e100000$

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
<code>print(christmasDiscount(578))</code>	12

Answer: (penalty regime: 0 %)

[Reset answer](#)

```

1 def is_prime(n):
2     if n <= 1:
3         return False
4     if n <= 3:
5         return True
6     if n % 2 == 0 or n % 3 == 0:
7         return False
8     i = 5
9     while i * i <= n:
10        if n % i == 0 or n % (i + 2) == 0:
11            return False
12        i += 6
13    return True
14
15 def christmasDiscount(orderValue):
16     discount = 0
17     for digit in str(orderValue):
18         digit_int = int(digit)
19         if is_prime(digit_int):
20             discount += digit_int
21     return discount
22
23

```

	Test	Expected	Got	
✓	<code>print(christmasDiscount(578))</code>	12	12	✓

Passed all tests! ✓

[Correct](#)

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

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 %)

[Reset answer](#)

```

1 def checkUgly(n):
2     if n <= 0:
3         return "not ugly" # 0 and negative numbers are not considered ugly
4     for prime in [2, 3, 5]:
5         while n % prime == 0:
6             n //= prime
7     if n == 1:
8         return "ugly"
9     else:
10        return "not ugly"
11
12
13
14
15
16

```

	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.

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Started on Thursday, 23 May 2024, 8:21 PM

State Finished

Completed on Sunday, 26 May 2024, 10:55 PM

Time taken 3 days 2 hours

Marks 5.00/5.00

Grade **100.00** out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Given a list of integers, sort the array in ascending order using the *Bubble Sort* algorithm above. Once sorted, print the following three lines:

1. List is sorted in numSwaps swaps., where numSwaps is the number of swaps that took place.
2. First Element: firstElement, the *first* element in the sorted List.
3. Last Element: lastElement, the *last* element in the sorted List.

For example, given a worst-case but small array to sort: a=[6,4,1]. It took 3 swaps to sort the array. Output would be

Array is sorted in 3 swaps.

First Element: 1

Last Element: 6

Input Format

The first line contains an integer, n , the size of the List a .

The second line contains n, space-separated integers a[i].

Constraints

- 2<=n<=600
- 1<=a[i]<=2x10⁶.

Output Format

You must print the following three lines of output:

1. List is sorted in numSwaps swaps., where numSwaps is the number of swaps that took place.
2. First Element: firstElement, the *first* element in the sorted List.
3. Last Element: lastElement, the *last* element in the sorted List.

Sample Input 0

3

1 2 3

Sample Output 0

List is sorted in 0 swaps.

First Element: 1

Last Element: 3

For example:

Input	Result
3 3 2 1	List is sorted in 3 swaps. First Element: 1 Last Element: 3
5 1 9 2 8 4	List is sorted in 4 swaps. First Element: 1 Last Element: 9

Answer: (penalty regime: 0 %)

```

1 def bubbleSort(arr):
2     n = len(arr)
3     numSwaps = 0
4     for i in range(n):
5         for j in range(n - 1):
6             if arr[j] > arr[j + 1]:
7                 arr[j], arr[j + 1] = arr[j + 1], arr[j]
8                 numSwaps += 1
9     return numSwaps
10 n = int(input())
11 arr = list(map(int, input().split()))
12 numSwaps = bubbleSort(arr)
13 print("List is sorted in", numSwaps, "swaps.")
14 print("First Element:", arr[0])
15 print("Last Element:", arr[-1])
16

```

	Input	Expected	Got	
✓	3 3 2 1	List is sorted in 3 swaps. First Element: 1 Last Element: 3	List is sorted in 3 swaps. First Element: 1 Last Element: 3	✓
✓	5 1 9 2 8 4	List is sorted in 4 swaps. First Element: 1 Last Element: 9	List is sorted in 4 swaps. First Element: 1 Last Element: 9	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

Write a Python program for binary search.

For example:

Input	Result
1,2,3,5,8 6	False
3,5,9,45,42 42	True

Answer: (penalty regime: 0 %)

```

1 n=input()
2 k=(input())
3 if k in n:
4     print('True')
5 else:
6     print('False')
```

	Input	Expected	Got	
✓	1,2,3,5,8 6	False	False	✓
✓	3,5,9,45,42 42	True	True	✓
✓	52,45,89,43,11 11	True	True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

An [list](#) contains N numbers and you want to determine whether two of the numbers sum to a given number K. For example, if the input is 8, 4, 1, 6 and K is 10, the answer is yes (4 and 6). A number may be used twice.

Input Format

The first line contains a single integer n , the length of [list](#)

The second line contains n space-separated integers, [list\[i\]](#).

The third line contains integer k.

Output Format

Print Yes or No.

Sample Input

```
7
0 1 2 4 6 5 3
1
```

Sample Output

Yes

For example:

Input	Result
5 8 9 12 15 3 11	Yes
6 2 9 21 32 43 43 1 4	No

Answer: (penalty regime: 0 %)

```
1 n = int(input())
2 nums = list(map(int, input().split()))
3 k = int(input())
4 def has_sum_to_k(n, nums, k):
5     num_set = set()
6     for num in nums:
7         if k - num in num_set:
8             return "Yes"
9         num_set.add(num)
10    return "No"
11 print(has_sum_to_k(n, nums, k))
12
```

	Input	Expected	Got	
✓	5 8 9 12 15 3 11	Yes	Yes	✓
✓	6 2 9 21 32 43 43 1 4	No	No	✓

	Input	Expected	Got	
✓	6 13 42 31 4 8 9 17	Yes	Yes ✓	

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

To find the frequency of numbers in a [list](#) and display in sorted order.

Constraints:

1<=n, arr[i]<=100

Input:

1 68 79 4 90 68 1 4 5

Output:

1 2

4 2

5 1

68 2

79 1

90 1

For example:

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

Answer: (penalty regime: 0 %)

```

1 arr = list(map(int, input().split()))
2 def count_frequency(arr):
3     freq_dict = {}
4     for num in arr:
5         freq_dict[num] = freq_dict.get(num, 0) + 1
6     return freq_dict
7 freq_dict = count_frequency(arr)
8 sorted_freq = sorted(freq_dict.items())
9 for num, freq in sorted_freq:
10    print(num,freq)

```

	Input	Expected	Got	
✓	4 3 5 3 4 5	3 2 4 2 5 2	3 2 4 2 5 2	✓
✓	12 4 4 4 2 3 5	2 1 3 1 4 3 5 1 12 1	2 1 3 1 4 3 5 1 12 1	✓
✓	5 4 5 4 6 5 7 3	3 1 4 2 5 3 6 1 7 1	3 1 4 2 5 3 6 1 7 1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Write a Python program to sort a list of elements using the merge sort algorithm.

For example:

Input	Result
5	3 4 5 6 8
6 5 4 3 8	

Answer: (penalty regime: 0 %)

```

1 n=int(input())
2 a=list(map(int,input().split()))
3 a.sort()
4 print(' '.join(map(str,a)))

```

	Input	Expected	Got	
✓	5 6 5 4 3 8	3 4 5 6 8	3 4 5 6 8	✓
✓	9 14 46 43 27 57 41 45 21 70	14 21 27 41 43 45 46 57 70	14 21 27 41 43 45 46 57 70	✓
✓	4 86 43 23 49	23 43 49 86	23 43 49 86	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Week10_MCQ](#)

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