Started on	Thursday, 14 March 2024, 2:08 PM
State	Finished
Completed on	Thursday, 14 March 2024, 2:09 PM
Time taken	1 min 25 secs
Grade	**10.00** out of 10.00 (**100**%)

Question **1**

Correct

Mark 1.00 out of 1.00

What will be the output of the following python Code-

mystring="India is my country"

print(type(mystring))

a. str

b. class str

c. <class 'str'> ✓

d. 'str'

Your answer is correct.

The correct answer is:
<class 'str'>

Question **2**

Correct

Mark 1.00 out of 1.00

Which of the following declarations is incorrect in python language?

a. x,y,z,p = 5000, 6000, 7000, 8000 ✓

b. xyzp = 5,000,000

c. x y z p = 5000 6000 7000 8000

d. x_y_z_p = 5,000,000

Your answer is correct.

The correct answer is:
x,y,z,p = 5000, 6000, 7000, 8000

Question **3**

Correct

Mark 1.00 out of 1.00

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

Answer: float(input()) ✓

The correct answer is: float(input())

Question **4**

Correct

Mark 1.00 out of 1.00

Which of the following functions is a built-in function in python language?

a. printf()

b. scanf()

c. val()

d. print() ✓

Your answer is correct.

The correct answer is:
print()

Question **5**

Correct

Mark 1.00 out of 1.00

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

a. .python

b. .p

c. .py ✓

d. .cpp

Your answer is correct.

The correct answer is:
.py

Question **6**

Correct

Mark 1.00 out of 1.00

What will be the output of the following code snippet?

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

a. No output

b. 3 1 ✓
1 3

c. 3 1
3 1

d. 1 3
3 1

Your answer is correct.

The correct answer is:
3 1
1 3

Question **7**

Correct

Mark 1.00 out of 1.00

What will be the output of the following code snippet?

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

a. str

b. obj

c. float ✓

d. int

Your answer is correct.

The correct answer is:
float

Question **8**

Correct

Mark 1.00 out of 1.00

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

a. Curly brace

b. Parenthesis

c. Indentation ✓

d. Key

Your answer is correct.

The correct answer is:
Indentation

Question **9**

Correct

Mark 1.00 out of 1.00

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

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

a. No output

b. float and str

c. int and int

d. int and str ✓

Your answer is correct.

The correct answer is:
int and str

Question **10**

Correct

Mark 1.00 out of 1.00

Who developed the Python language?

a. Guido Van Rossum ✓

b. Dennis Ritchie

c. Von Neumann

d. Bill Gates

Your answer is correct.

The correct answer is:
Guido Van Rossum

◄ Basics of Python

Jump to...

Week1_Coding ►

Started on	Thursday, 14 March 2024, 2:10 PM
State	Finished
Completed on	Thursday, 4 April 2024, 1:14 PM
Time taken	20 days 23 hours
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 10.9	10,<class 'int'> 10.9,<class 'float'>

Answer: (penalty regime: 0 %)

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

```
a=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 %)

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

```
a=int(input())
b=(60/100)*a
print(a+b)
```

	Input	Expected	Got	
✓	10000	16000	16000.0	✓
✓	20000	32000	32000.0	✓
✓	28000	44800	44800.0	✓
✓	5000	8000	8000.0	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **3**

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 %)

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

```
a=float(input())
print(f'{a**0.5:.3f}')
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **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 500 60000	30.43 is the gain percent.

Answer: (penalty regime: 0 %)

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

```
x=int(input())
y=int(input())
z=int(input())
gain=z-(x+y)
gp=(gain/(x+y)*100)
print("%.2f is the gain percent."%gp)
```

	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.	✓

	Input	Expected	Got	
✓	5000 0 7000	40.00 is the gain percent.	40.00 is the gain percent.	✓
✓	12500 5000 18000	2.86 is the gain percent.	2.86 is the gain percent.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **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 20	Your total refund will be $7.00.

Answer: (penalty regime: 0 %)

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

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

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

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

	Input	Expected	Got	
✓	450	weekdays 10.38 weekend 0.38	weekdays 10.38 weekend 0.38	✓

	Input	Expected	Got	
✓	500	weekdays 10.00 weekend 0.00	weekdays 10.00 weekend 0.00	✓
✓	10000	weekdays 83.08 weekend 73.08	weekdays 83.08 weekend 73.08	✓
✓	6789	weekdays 58.38 weekend 48.38	weekdays 58.38 weekend 48.38	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ Week1_Quiz

Jump to...

Operators ►

Started on	Friday, 29 March 2024, 6:46 PM
State	Finished
Completed on	Friday, 29 March 2024, 6:56 PM
Time taken	9 mins 50 secs
Grade	**11.00** out of 15.00 (**73.33**%)

Question **1**

Correct

Mark 1.00 out of 1.00

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

a. **_var**

b. **var11**

c. **5var** ✓

d. **var_name**

Your answer is correct.

The correct answer is:

5var

Question **2**

Correct

Mark 1.00 out of 1.00

In the Python statement `x = a + 6 - c-d`:

- `a` and `b` are _____
- `a + 6 - c-d` is _____

a. operators, a statement

b. operands, an expression ✓

c. terms, a group

d. operands, an equation

Your answer is correct.

The correct answer is:
operands, an expression

Question **3**

Correct

Mark 1.00 out of 1.00

What is the order of precedence in python?

1. **Multiplication**
2. **Division**
3. **Parentheses**
4. **Addition**
5. **Exponentiation**

a. **1,5,2,4,3**

3,1,2,4,5

b. **3,1,2,4,5**

c. **3,5,1,2,4** ✓

d. **1,2,3,4,5**

Your answer is correct.

The correct answer is:

3,5,1,2,4

Question **4**

Correct

Mark 1.00 out of 1.00

Which of the following type of Python operator will only print True or False in output when we use it in our program?

a. Membership Operator

b. Assignment Operator

c. Arithmetic Operator

d. Comparison Operator ✓

Your answer is correct.

The correct answers are:

Membership Operator,

Comparison Operator

Question **5**

Correct

Mark 1.00 out of 1.00

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

a. 4

b. 2

c. 3

d. 1 ✓

Your answer is correct.

The correct answer is:

1

Question **6**

Correct

Mark 1.00 out of 1.00

What is the two's complement of -44?

- a. 11010100 ✓
- b. 10110011
- c. 1011011
- d. 11101011

Your answer is correct.

The correct answer is:
11010100

Question **7**

Correct

Mark 1.00 out of 1.00

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

x>>2

- a. 2
- b. 8 ✓
- c. 4
- d. 1

Your answer is correct.

The correct answer is:
8

Question **8**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code: print 11//2?

a. 5.5

b. Error

c. 5 ✕

d. 5.0

Your answer is incorrect.

The correct answer is:
Error

Question **9**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code

```
x = 5
y = 3
print(x == y)
```

a. Error

b. 5==3 ✕

c. True

d. False

Your answer is incorrect.

The correct answer is:
False

Question **10**

Incorrect

Mark 0.00 out of 1.00

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)
```

a. **True**
True
True

b. **False**
False
True

c. **True** ✕
False
False

d. **True**
False
True

Your answer is incorrect.

The correct answer is:
True
False
True

Question **11**

Incorrect

Mark 0.00 out of 1.00

State the output of the following code.

num1 = '10'

num2 = '20'

sum = num1 + num2

print(sum)

- a. 1020 ✗
- b. Error
- c. 10
- d. 30

Your answer is incorrect.

The correct answer is:
Error

Question **12**

Correct

Mark 1.00 out of 1.00

What is the value of the expression

```
print(100 / 25)
print(100//25)
```

- a. 4
  4
- b. 4.0
  4.00
- c. 4.0
  4.0
- d. 4.0 ✓
  4

Your answer is correct.

The correct answer is:
4.0

4

Question **13**

Correct

Mark 1.00 out of 1.00

An identifier can have a maximum length of -------- characters in Python.

a. 50

b. 7

c. 79 ✓

d. 31

Your answer is correct.

The correct answer is:
79

Question **14**

Correct

Mark 1.00 out of 1.00

What is the output of the following code

```
print(bool(0), bool(3.14159), bool(-3), bool(1.0+1j))
```

a.
- True True False True

b.
- False True True True ✓

c.
- False True False True

d.
- True True False True

Your answer is correct.

The correct answer is:

- False True True True

Question **15**

Correct

Mark 1.00 out of 1.00

What will be the output of statement 22**2**2**

a. 32768

b. 256

c. 65536 ✓

d. 16

Your answer is correct.

The correct answer is:
65536

◄ Operators

Jump to...

Week2_Coding ►

12

10

9

OUTPUT

True False True False

For example:

Input	Result
5 25 23 20 10	True False True True

Answer: (penalty regime: 0 %)

```
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)
```

Correct

Marks for this submission: 1.00/1.00.

3	2

Answer: (penalty regime: 0 %)

```
a=int(input())
b=bin(a).count("1")
print(b)

```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

For example:

Input	Result
101	False

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 print(n>0 and n<100 and n%2==0 and n!=0 )
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Display True(IF ELIGIBLE)

Display False (if not eligible)

Sample Input

19

45

Sample Output

True

For example:

Input	Result
18 40	False

Answer: (penalty regime: 0 %)

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

Sample Output:'
False

For example:

Input	Result
32 43	False

Answer: (penalty regime: 0 %)

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

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

```
C
```

```
Input 2:
1

Output 1:
D
```

For example:

Input	Result
0	C

Answer: (penalty regime: 0 %)

```
n=int(input())
print(n and 'D' or 'C')
```

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 %)

```
widget=int(input())
gizmo=int(input())
t=(widget*75+gizmo*112)
print("The total weight of all these widgets and gizmos is",t, "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.

```
b=((4/100)*a)+a
c=((4/100)*b)+b
d=((4/100)*c)+c
print("Balance as of end of Year 1: $%.2f."%b)
print("Balance as of end of Year 2: $%.2f."%c)
print("Balance as of end of Year 3: $%.2f."%d)
```

	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.

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

Answer: (penalty regime: 0 %)

```
a=int(input())
b=(5/100)*a
c=(18/100)*a
t=(b+c+a)
print("The tax is %.2f"%b,"and the tip is %.2f,"%c,"making the total %.2f"%t)


```

	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.

Answer: (penalty regime: 0 %)

```
n=int(input())
a=abs(n)
b=a%10
print(b)
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ Week2_MCQ

Jump to...

Selection control structures ►

Started on	Wednesday, 17 April 2024, 4:55 PM
State	Finished
Completed on	Wednesday, 17 April 2024, 5:11 PM
Time taken	16 mins 20 secs
Grade	**8.00** out of 15.00 (**53.33**%)

Question **1**

Incorrect

Mark 0.00 out of 1.00

What is the output of the code given below?

```
a = -10
b = -200
c = 2000
d = 4000
if( a*b >=d):
    if(d>c):
        if(d%c!=0):
            print(11)
        else:
            print(22)
else:
    if(b/a >0):
        if(a<b or d%c!=0):
          print(33)
        else:
          print(44)
```

a. 44

b. 33 ✗

c. 11

d. 22

Your answer is incorrect.

The correct answer is:
44

Question **2**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code.

```
a=90
if a>100:
    if(a<=90 and a==90):
        print("REC")
    else:
        print("OPEN-ELECTIVE")
```

a. REC
OPEN-ELECTIVE

b. REC ✗

c. No output

d. OPEN-ELECTIVE

Your answer is incorrect.

The correct answer is:
No output

Question **3**

Correct

Mark 1.00 out of 1.00

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

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

a. 45

b. 35 ✓

c. 15

d. 30

Your answer is correct.

The correct answer is:
35

Question **4**

Incorrect

Mark 0.00 out of 1.00

What will be the output?

```
a=11
b=5
if (a%b==0):
    print ( "hello")
if (a//b==0):
    print ( "hi")
else:
    print ("python")
```

- a. hello ✗
- b. python
- c. hi

Your answer is incorrect.

The correct answer is:
python

Question **5**

Correct

Mark 1.00 out of 1.00

Leading whitespace (spaces and tabs) at the beginning of a statement is called _____.

- a. **Iteration**
- b. **orientation**
- c. **indentation** ✓
- d. **None of the above**

Your answer is correct.

The correct answer is:
indentation

Question **6**

Correct

Mark 1.00 out of 1.00

selection is implemented with the help of _____ statement

- a. while loop
- b. if..else ✓
- c. for loop

Your answer is correct.

The correct answer is:
if..else

Question **7**

Correct

Mark 1.00 out of 1.00

```
x,y=1,2
if(x or y):
    print("1")
else:
    print("0")
```

- a. Runtime error
- b. 1 ✓
- c. 0
- d. Compile time error

Your answer is correct.

The correct answer is:
1

Question **8**

Correct

Mark 1.00 out of 1.00

What is the output of the given below program?

```
if 1 + 3 == 7:
   print("Hello")
else:
   print("REC")
```

a. **REC** ✓

b. Hello

c. Compiled Successfully, No Output.

Your answer is correct.

The correct answer is:
REC

Question **9**

Correct

Mark 1.00 out of 1.00

Correct syntax of writing 'simple if' statement is _____

a. **if (condition)**
statements

b. **if condition :** ✓
statements

c. **if condition**
statements

d. **if condition --**
statements

Your answer is correct.

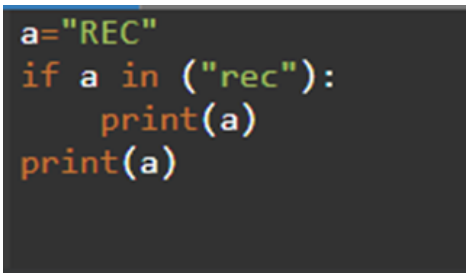
The correct answer is:
if condition :
statements

Question **10**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code.



```
a="REC"
if a in ("rec"):
    print(a)
print(a)
```

a. REC
REC

b. false ✕
REC

c. No output
REC

d. REC

Your answer is incorrect.

The correct answer is:
REC

Question **11**

Correct

Mark 1.00 out of 1.00

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")
```

a. Hi ✓
Hello

b. Hello
Know Program

c. Hi
Know Program

d. Hello

Your answer is correct.

The correct answer is:
Hi
Hello

Question **12**

Incorrect

Mark 0.00 out of 1.00

Ahaana wants to make a fun program , if user enters any number a “Good” or “funny” message will appear . She is confused that which is the most suitable control to be used to make such program. Help her to choose correct option.

a. if else

b. If ✗

c. Nested if

d. if elif

Your answer is incorrect.

The correct answer is:
if else

Question **13**

Incorrect

Mark 0.00 out of 1.00

What should be the value of num1 and num2 to get the output as "1"?

```
if((num1/num2==5) and (num1+num2)>5):
    print("1")
elif((num1-num2)<=1 or (num1%num2)==0):
    print("2")
else:
    print("3")
```

a. num1=-10,num2=2

b. num1=5, num2=1

c. num1=0, num2=5

d. num1=11, num2=2 ✗

Your answer is incorrect.

The correct answer is:
num1=5, num2=1

Question **14**

Correct

Mark 1.00 out of 1.00

With what extension are the python files saved?

a. .p

b. .pyn

c. .python

d. .py ✓

Your answer is correct.

The correct answer is:
.py

Question **15**

Incorrect

Mark 0.00 out of 1.00

```
if(x=-1):
    print("present")
else:
    print("absent")
```

- a. compilation error ✕
- b. present
- c. absent
- d. Runtime Error

Your answer is incorrect.

The correct answer is:
present

◄ Selection control structures

Jump to...

Week3_coding ►

Started on	Wednesday, 17 April 2024, 6:15 PM
State	Finished
Completed on	Wednesday, 17 April 2024, 9:07 PM
Time taken	2 hours 52 mins
Marks	9.00/10.00
Grade	**90.00** out of 100.00

Question 1

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 %)

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

```
units=float(input())
if units<=199:
    amt=units*1.20
    if amt<100:
        amt=100
        print("%.2f"%amt)
    else:
        print("%.2f"%amt)
elif units>=200 and units <400:
    amt=units*1.50
elif units>=400 and units <600:
    amt=units*1.80
else:
    amt=units*2.00

if amt>400:
    amt=amt+(amt*0.15)
    print("%.2f"%amt)
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

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 %)

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

```
a=int(input())
b=int(input())
c=int(input())
if(a==b and b==c and c==a):
    print("That's a equilateral triangle")
elif(a==b and c>a and c>b):
    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 **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 %)

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

```
a=int(input())
if a>=0 and a%12==8:
    print(a,"is the year of the Dragon.")
elif a>=0 and a%12==9:
    print(a,"is the year of the Snake.")
elif a>=0 and a%12==10:
    print(a,"is the year of the Horse.")
elif a>=0 and a%12==11:
    print(a,"is the year of the Sheep.")
elif a>=0 and a%12==0:
    print(a,"is the year of the Monkey.")
elif a>=0 and a%12==1:
    print(a,"is the year of the Rooster.")
elif a>=0 and a%12==2:
    print(a,"is the year of the Dog.")
elif a>=0 and a%12==3:
    print(a,"is the year of the Pig.")
elif a>=0 and a%12==4:
```

	Input	Expected	Got	
✓	2010	2010 is the year of the Tiger.	2010 is the year of the Tiger.	✓
✓	2020	2020 is the year of the Rat.	2020 is the year of the Rat.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **4**

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 %)

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

```
m=(input())
if(m=="January") or (m=="March") or (m=="May") or (m=="July") or (m=="August") or (m=="October") or
(m=="December"):
 print(m,"has 31 days in it.")
elif(m=="April") or (m=="June") or (m=="September") or (m=="November"):
 print(m,"has 30 days in it.")
else:
 print(m,"has 28 or 29 days in it.")
```

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

	Input	Expected	Got	
✓	5 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 **5**

Correct

Mark 1.00 out of 1.00

IN / OUT

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

Input Format:

Input consists of 2 integers.

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

Output Format:

Output consists of the string “IN” or “OUT”.

Sample Input and Output:

Input

8

3

Output

OUT

For example:

Input	Result
8 3	OUT

Answer: (penalty regime: 0 %)

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

```
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 **6**

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 10the digit in the tens place in the given number.

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

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

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

For example:

Input	Result
197	9
5	-1

Answer: (penalty regime: 0 %)

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

```
a=abs(int(input()))
if a%10==a:
    print(-1)
else:
    d1=a%10
    a=a//10
    d2=a%10
    a=a//10
    print(d2)
```

	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 7

Incorrect

Mark 0.00 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 %)

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

```
year=int(input())
if(year%400==0 and year%4==0):
    print(year,"is a leap year.")
elif(year%100==0):
    print(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.		✗

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

Show differences

Incorrect

Question **8**

Correct

Mark 1.00 out of 1.00

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

Marks in Maths >= 65

Marks in Physics >= 55

Marks in Chemistry >= 50

Or

Total in all three subjects >= 180

Sample Test Cases

Test Case 1

Input

70

60

80

Output

The candidate is eligible

Test Case 2

Input

50

80

80

Output

The candidate is eligible

Test Case 3

Input

50

60

40

Output

The candidate is not eligible

For example:

Input	Result
70 60 80	The candidate is eligible

Answer: (penalty regime: 0 %)

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

```
a=int(input())
b=int(input())
c=int(input())
if(a>=65 and b>=55 and c>=50):
    print("The candidate is eligible")
elif(a+b+c>=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 **9**

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 %)

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

```
a=input()
if(a=="a" or a=="e" or a=="i" or a=="o" or a=="u"):
    print("It's a vowel.")
elif(a=="y"):
    print("Sometimes it's a vowel... Sometimes it's a consonant.")
else:
    print("It's a consonant.")
```

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

	Input	Expected	Got	
✓	A	It's a consonant.	It's a consonant.	✓
✓	e	It's a vowel.	It's a vowel.	✓
✓	r	It's a consonant.	It's a consonant.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **10**

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*3 + 4*4 = 25 = 5*5

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

Sample Input

3

5

4

Sample Output

yes

Sample Test Cases

Test Case 1

Input

3

5

4

Output

yes

Test Case 2

Input

5

8

2

Output

no

Answer: (penalty regime: 0 %)

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

```
a=int(input())
b=int(input())
c=int(input())
if((a*a+b*b)==(c*c)) or ((a*a+c*c)==(b*b)) or ((c*c+b*b)==(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.

◄ Week3_mcq

Jump to...

Iteration control structures ►

Started on	Sunday, 21 April 2024, 11:41 AM
State	Finished
Completed on	Sunday, 21 April 2024, 12:06 PM
Time taken	25 mins 3 secs

Question **1**
Complete

The range() function returns a

- a. sequence of numbers
- b. sequence of set
- c. sequence of lists
- d. sequence of bytes

Question **2**
Complete

The range() function by defaults increments by

Answer: By 1

Question **3**
Complete

```
numbers = (8, 9, 11, 20)
a = 1
for num in numbers:
    a = a * num
print(a)
```

Predict the output of the program?

Answer: 8.9.11.20

Question **4**

Complete

```
Predict the output of the program?
for x in range(2, 8, 5):
    print(x)
```

a. 2 4 6 8

b. 2 8

c. 2 7

d. 2 3 4 5 6 7 8

Question **5**

Complete

Which of the following is a loop in python?

a. For

b. Do-While

c. If-Else

d. Break

Question **6**

Complete

```
i=1
while True:
        if i%0o7==0:
                break
        print(i)
        i+=1
```

Predict the output of the following?

a. 1 2 3 4 5 6

b. 1 2 3 4 5 6 7

c. 0 1 2 3 4 5 6 7

d. 7

Question **7**

Complete

```
i = 1
while i < 4:
   print(i)
   if (i == 2):
      break
```

```
i += 1
Predict the output of the following?
```

a. Compiler Error

b. 1 2

c. 2 3 4

d. 1 2 3 4

Question **8**

Complete

```
True= False
while(True):
        print(True)
        break

What is the output of the following?
```

a. **True**

b. **No output**

c. **Syntax Error**

d. **False**

Question **9**

Complete

Syntax of range()

a. (start, step, stop)

b. (stop, step, start)

c. (step, stop, start)

d. (start, stop, step)

Question **10**

Complete

```
Predict the output of the program?
for x in range(4):
   if x == 3: break
      print(x)
   else:
      print("Finally finished!")
```

a. Finally Finished!

b. 0
1
2
3

c. 0
1
2
3
Finally Finished!

d. 0
1
2

Question **11**

Complete

```
Predict the output of the following
i = 2
while i < 4:
    print(i)
    i += 1
```

a. 1 2 3 4

b. 3 4

c. 2 3 4

d. 2 3

Question **12**

Complete

```
How many times it will print the statement?
for i in range(102):
   print(i)
```

Answer: 101

Question **13**

Complete

```
i = 1
while i < 4:
   print(i)
   if (i == 2):
      break
```

```
i += 1
Predict the output of the following?
```

a. Compiler Error

b. 1 2

c. 2 3 4

d. 1 2 3 4

Question **14**

Complete

```
Predict the output of the program?
for x in range(4):
   if x == 3: break
      print(x)
   else:
      print("Finally finished!")
```

a. 0
1
2
3
Finally Finished!

b. 0
1
2
3

c. Finally Finished!

d. 0
1
2

Question **15**

Complete

For loop follows which principle?

a. Single responsibility

b. Open/closed

c. Don't Repeat Yourself (DRY)

d. You Aren't Going to Need It(YAGNI)

◄ Iteration control structures

Jump to...

Week4_Coding ►

Started on	Thursday, 18 April 2024, 1:00 PM
State	Finished
Completed on	Sunday, 21 April 2024, 11:41 PM
Time taken	3 days 10 hours
Overdue	1 day 10 hours
Marks	10.00/10.00
Grade	**100.00** out of 100.00

Question **1**

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=input()
unique_digits=set(n)
print(len(unique_digits))
```

	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 **2**

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())
r=int(n**0.5)+1
p=r*r
print(p)
```

	Input	Expected	Got	
✓	10	16	16	✓

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 <= N <=5000, where N is the given number.

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

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

For example:

Input	Result
7	2
10	1

Answer: (penalty regime: 0 %)

```
n=int(input())
for i in range(2,n):
    if n%2!=0:
        print("2")
        break
    else:
        print("1")
        break
```

	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 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=str(int(input()))
s=0
for i in n:
    c=n.count(i)
    if(c==1):
        s=s+1
print(s)
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

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=n+1
a=int(n**0.5)
if(a*a==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.

Question **6**

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 x 4 x 3 x 2 x 1 = 120

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

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

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

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

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

Assumptions for this program:

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

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

For example:

Input	Result
5	120
4	24
9	362880

Answer: (penalty regime: 0 %)

```
n=int(input())
fact=1
for i in range(n,0,-1):
    fact=fact*i
print(fact)
```

	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 **7**

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=-1
b=1
for i in range (1,n+1):
    c=a+b
    a=b
    b=c
print(c)
```

	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 **8**

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 %)

```
a=int(input())
temp=a
d=0
while a!=0:
    a=a//10
    d=d+1
a=temp
sum=0
while a!=0:
    rem=a%10
    sum=sum+(rem**d)
    a=a//10
    d=d-1
if sum==temp:
    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 **9**

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 %)

```
a=int(input())
c=1
sum=0
for i in range (1,a+1,1):
    sum=sum +c
    c=c*10+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 **10**

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 %)

```
a=int(input())
flag=0
for i in range (1,10):
    if a%i==0 and a//i<10:
        flag=1
        break
if flag==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.

◄ Week4_mcq

Jump to...

Strings ►

Started on	Tuesday, 14 May 2024, 6:16 PM
State	Finished
Completed on	Tuesday, 14 May 2024, 6:30 PM
Time taken	13 mins 16 secs
Grade	**10.00** out of 15.00 (**66.67**%)

Question **1**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
print('*', "abcde".center(7), '*', sep='')
```

a. *abcde* ✗

b. *abcde *

c. * abcde *

d. * abcde*

Your answer is incorrect.

The correct answer is:
* abcde *

Question **2**

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

```
str1="vijay"
for i in range(len(str1),6):
    print(i)
```

a. y

b. 5 ✓

c. vijay

d. None of the above

Your answer is correct.

The correct answer is:
5

Question **3**

Correct

Mark 1.00 out of 1.00

What will following Python code return?

```
str1="Stack of books"
print(len(str1))
```

a. 13

b. 15

c. 16

d. 14 ✓ len() returns the length of the given string str1, including spaces and considering " " as a single character.

Your answer is correct.

The correct answer is:
14

Question **4**

Correct

Mark 1.00 out of 1.00

What is the output of the following Code?

print(ord('D'))

Answer: 68 ✓

The correct answer is: 68

Question **5**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

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

a. REC. VIJAY

b. Rec. vijay

c. rec. vijay

d. Rec. Vijay ✗

Your answer is incorrect.

The correct answer is:
Rec. vijay

Question **6**

Correct

Mark 1.00 out of 1.00

```
Python considered the character enclosed in triple quotes as String.
```

Select one:

- True ✓
- False

The correct answer is 'True'.

Question **7**

Correct

Mark 1.00 out of 1.00

```
What will be the output of below Python code?
```

```
str1="Application"
str2=str1.replace('a','A')
print(str2)
```

Answer: ApplicAtion ✓

replace() function in string is used here to replace all the existing "a" by "A" in the given string.

The correct answer is: ApplicAtion

Question **8**

Correct

Mark 1.00 out of 1.00

What is the output of the following Code?

```
str1="vijay"
print(str1.capitalize())
```

Answer: Vijay ✓

The correct answer is: Vijay

Question **9**

Correct

Mark 1.00 out of 1.00

What will be the output of below Python code?

```
str1="poWer"
str1.upper()
print(str1)
```

Answer: POWER ✓

str1.upper() returns the uppercase of whole string str1. However,it doesnot change the string str1. So, output will be the original str1.

The correct answer is: poWer

Question **10**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code ?

```
a = '''A
B
C'''
print(a)
```

a. `ABC` ✗

b.
```
A
B
C
```

c. `Error`

d.
```
A
BC
```

Your answer is incorrect.

The correct answer is:

```
A
B
C
```

Question **11**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

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

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

b. i i i i i i . . . ✗

c. None

d. arvjayakumar

Your answer is incorrect.

The correct answer is:
None

Question **12**

Incorrect

Mark 0.00 out of 1.00

What arithmetic operators cannot be used with strings in Python?

a. +

b. -

c. All of the mentioned

d. * ✗

Your answer is incorrect.

The correct answer is:
-

Question **13**

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

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

a. None of the above

b. 01234

c. vijay ✓

d. No output

Your answer is correct.

The correct answer is:
vijay

Question **14**

Correct

Mark 1.00 out of 1.00

What will be the output of below Python code?

```
str1="Information"
print(str1[2:8])
```

Answer: format ✓

Concept of slicing is used in this question. In string slicing,the output is the substring starting from the first given index position i.e 2 to one less than the second given index position i.e.(8-1=7) of the given string str1. Hence, the output will be "format".

The correct answer is: format

Question **15**

Correct

Mark 1.00 out of 1.00

Strings are immutable?

Select one:

True ✓

False

The correct answer is 'True'.

◄ Strings

Jump to...

Week5_Coding ►

Started on	Thursday, 9 May 2024, 8:35 PM
State	Finished
Completed on	Tuesday, 14 May 2024, 10:54 PM
Time taken	5 days 2 hours
Overdue	3 days 2 hours
Marks	10.00/10.00
Grade	**100.00** out of 100.00

Question **1**

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=list(input())
s2=list(input())
for i in s2:
    while i in s1:
        s1.remove(i)
print(''.join(s1))

```

	Input	Expected	Got	
✓	experience enc	xpri	xpri	✓

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 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 %)

```
s=input()
l=n=c=0
for i in s:
    if(i.isalpha()):
        l=l+1
    elif(i.isdecimal()):
        n=n+1
    else:
        c=c+1
print(l)
print(n)
print(c)
```

	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 **3**

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 <= Length of S <= 100

Example Input/Output 1:

Input:

abcd@gmail.com

Output:

com
gmail
abcd

For example:

Input	Result
arvijayakumar@rajalakshmi.edu.in	edu.in rajalakshmi arvijayakumar

Answer: (penalty regime: 0 %)

```
s=input()
s1=s.find('@')
s2=s.find('.')
print(s[s2+1:])
print(s[s1+1:s2])
print(s[:s1])
```

	Input	Expected	Got	
✓	abcd@gmail.com	com gmail abcd	com gmail abcd	✓
✓	arvijayakumar@rajalakshmi.edu.in	edu.in rajalakshmi arvijayakumar	edu.in rajalakshmi arvijayakumar	✓

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 %)

```
s=input().split()
if (len(s)>=2):
    print(s[1].upper())
else:
    print("LESS")

```

	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

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 %)

```
l=[]
try:
    while True:
        s=input( )
        if s not in l:
            l.append(s)
except EOFError:
    print('\n' .join(l))
```

	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.

Question **6**

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()
a=" "
for i in s:
    if i.isalpha():
        a=a+i
a=a[::-1]
k=0
for i in s:
    if i.isalpha():
        print(a[k],end="")
        k=k+1
    else:
        print(i,end="")
```

	Input	Expected	Got	
✓	A&B	B&A	B&A	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **7**

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 <= N <= 10
2 <= Length of S1, S2 <= 1000

Example Input/Output 1:

Input:

abcbde
cdefghbb
3

Output:

bcd

Note:

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

Answer: (penalty regime: 0 %)

```
s1=input().strip()
s2=input().strip()
n=int(input().strip())
common_chars=set(s1) & set(s2)
result=[]
for char in s1:
    if char in common_chars:
        result.append(char)
        common_chars.remove(char)
        if len(result)==n:
            break
print(''.join(result))

```

	Input	Expected	Got	
✓	abcbde cdefghbb 3	bcd	bcd	✓

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

For example:

Input	Result
Yn PYnative	True

Answer: (penalty regime: 0 %)

```
print(input( ) in input( ))

```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **9**

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

aabbbbccccccc

Answer: (penalty regime: 0 %)

```
a=input()
temp=0
char=''
for i in a:
    if i.isalpha():
        print(char*temp,end='')
        temp=0
        char=i
    else:
            temp=temp*10+int(i)
print(char*temp,end='')
```

	Input	Expected	Got	
✓	a2b4c6	aabbbbccccccc	aabbbbccccccc	✓
✓	a12b3d4	aaaaaaaaaaaabbbdddd	aaaaaaaaaaaabbbdddd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **10**

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 %)

```
a=input()
for i in a.split():
    i=i.lower()
    if i!=i[::-1]:
        print(i,end=' ')
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ Week5_MCQ

Jump to...

List ►

Started on	Saturday, 1 June 2024, 8:13 PM
State	Finished
Completed on	Saturday, 1 June 2024, 8:44 PM
Time taken	31 mins 7 secs
Grade	**9.00** out of 15.00 (**60**%)

Question **1**

Correct

Mark 1.00 out of 1.00

Which of the following is a standard Python library function and not an exclusively list function?

a. len() ✓

b. pop()

c. remove()

d. append()

Your answer is correct.

The correct answer is:
len()

Question **2**

Incorrect

Mark 0.00 out of 1.00

To shuffle the list(say list1) what function do we use?

a. random.shuffle(list1)

b. list1.shuffle() ✗

c. random.shuffleList(list1)

Your answer is incorrect.

The correct answer is:
random.shuffle(list1)

Question **3**

Incorrect

Mark 0.00 out of 1.00

```
L=['Amit','Anita','Zee','Longest Word']
print(max(L))
```

Answer: Longest word ✗

The correct answer is: Zee

Question **4**

Correct

Mark 1.00 out of 1.00

What will be the output after the following statements?

```
m = [25, 34, 70, 63]
n = m[2] - m[0]
print👎
```

- a. 25
- b. 70
- c. 34
- d. 45 ✓

Your answer is correct.

The correct answer is:
45

Question **5**

Correct

Mark 1.00 out of 1.00

Find the output?

```
list1 = [1, 2, 3, 4,1,2,3]
list1.sort()
list1.pop()
list1.reverse()
print(list1)
```

- a. [3, 3, 2, 2, 1, 1] ✓
- b. [3, 2, 1, 3, 2, 1]
- c. [4, 3, 3, 2, 2, 1, 1]
- d. [4, 3, 3, 2, 2, 1]

Your answer is correct.

The correct answer is:
[3, 3, 2, 2, 1, 1]

Question **6**

Incorrect

Mark 0.00 out of 1.00

Find the output?

```
list3=[]
list1 ='REC_CSE_ECE'
list2= list1.split('_')
for i in list2:
    list3.extend(i)
print(list3)
```

- a. ['REC_CSE_ECE']
- b. ['REC', 'CSE', 'ECE'] ✗
- c. Error
- d. ['R', 'E', 'C', 'C', 'S', 'E', 'E', 'C', 'E']

Your answer is incorrect.

The correct answer is:
['R', 'E', 'C', 'C', 'S', 'E', 'E', 'C', 'E']

Question **7**

Incorrect

Mark 0.00 out of 1.00

What will be the output after the following statements?
m = [5, 10, 35]
del m[:]
print(m)

- a. [5, 35] ✗
- b. [5, 10, 35]
- c. 5, 10, 35
- d. []

Your answer is incorrect.

The correct answer is:
[]

Question **8**

Incorrect

Mark 0.00 out of 1.00

```
1. myList = [1, 5, 5, 5, 5, 1]
2. max = myList[0]
3. indexOfMax = 0
4. for i in range(1, len(myList)):
5.     if myList[i] > max:
6.         max = myList[i]
7.         indexOfMax = i
8. print(indexOfMax)
```

Answer: 6 ✗

The correct answer is: 1

Question **9**

Correct

Mark 1.00 out of 1.00

What will be the output after the following statements?
m = ['July', 'September', 'December']
n = m[1]
print👎

a. July

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

c. September ✓

d. December

Your answer is correct.

The correct answer is:
September

Question **10**

Correct

Mark 1.00 out of 1.00

What will be the output after the following statements?
m = [75, 23, 64]
n = m[0] + m[1]
print👎

a. 75

b. 64

c. 98 ✓

d. 23

Your answer is correct.

The correct answer is:
98

Question **11**

Correct

Mark 1.00 out of 1.00

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])
```

a. hi we are the elements

b. hi we are the ✓

c. hi we are the elements in a list

d. hi we are

Your answer is correct.

The correct answer is:
hi we are the

Question **12**

Incorrect

Mark 0.00 out of 1.00

Find the output?

```
list1 = [1, 2, 3, 4]
list1.append([5,6,7,8])
print(list1)
```

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

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

c. [1,2,3,4,5,6,7,8] ✗

d. [1,2,3,4]

Your answer is incorrect.

The correct answer is:
[1,2,3,4,[5,6,7,8]]

Question **13**

Correct

Mark 1.00 out of 1.00

Which of the following can delete an element from a list, if its value is given?

a. extend()

b. pop()

c. remove() ✓

d. del()

Your answer is correct.

The correct answer is:
remove()

Question **14**

Correct

Mark 1.00 out of 1.00

What will be the output after the following statements?
m = [45, 51, 67]
n = m[2]
print👇

a. [45, 51, 67]

b. 51

c. 45

d. 67 ✓

Your answer is correct.

The correct answer is:
67

Question **15**

Correct

Mark 1.00 out of 1.00

Suppose list1 is [3, 4, 5, 20, 5, 25, 1, 3], what is list1 after list1.reverse()?

a. [1, 3, 3, 4, 5, 5, 20, 25]

b. [3, 1, 25, 5, 20, 5, 4, 3] ✓

c. [3, 4, 5, 20, 5, 25, 1, 3]

Your answer is correct.

The correct answer is:
[3, 1, 25, 5, 20, 5, 4, 3]

◄ List

Jump to...

Week6_Coding ►

GE19211 / GE23233 / GE23231 - PSPP/PUP

Week6_Coding

Done

Opened: Thursday, 25 April 2024, 3:26 PM
Closed: Monday, 10 June 2024, 11:59 PM

Attempts allowed: 10

Time limit: 2 days

Grading method: Highest grade

Summary of your previous attempts

Attempt	State	Marks / 10.00	Grade / 100.00	Review
1	Finished Submitted Friday, 31 May 2024, 7:19 PM	10.00	100.00	Review

Your final grade for this quiz is 100.00/100.00.

Back to the course

◄ Week6_MCQ

Jump to...

Tuples ►

Started on	Saturday, 1 June 2024, 9:13 PM
State	Finished
Completed on	Saturday, 1 June 2024, 9:39 PM
Time taken	26 mins 13 secs
Grade	**9.00** out of 15.00 (**60**%)

Question **1**

Correct

Mark 1.00 out of 1.00

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))
```

a. True ✓
True

b. True
False

c. False
True

d. False
False

Your answer is correct.

The correct answer is:
True

True

Question **2**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code

```
aSet = {1, 'rec', ('cse', 'ece'), True}
print(aSet)
```

a. {'rec', 1, ('cse', 'ece'),True}

b. {'rec', 1, ('cse', 'ece')}

c. {'rec', True, ('cse', 'ece')}

d. Error ✗

Your answer is incorrect.

The correct answer is:
{'rec', 1, ('cse', 'ece')}

Question **3**

Correct

Mark 1.00 out of 1.00

Find the output of the given Python program?

t = (11, 3)

x = 3 * t

print(x)

a. (11,3,11,11,3,11,11,11,3)

b. (11, 3, 11, 3, 11, 3) ✓

c. (11,3)(11,3)(11,3)

d. [11,11,11,3,3,3]

Your answer is correct.

The correct answer is:
(11, 3, 11, 3, 11, 3)

Question **4**

Correct

Mark 1.00 out of 1.00

Which of the following is a Python tuple?

- a. [1,2,3,4]
- b. {1,3,8,9,41}
- c. ("Wonder")
- d. (1,4,5,6,7) ✓

Your answer is correct.

The correct answer is:
(1,4,5,6,7)

Question **5**

Correct

Mark 1.00 out of 1.00

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:])
```

- a. i,iii ✓
- b. i,ii
- c. ii,iv
- d. iii,iv

Your answer is correct.

The correct answer is:
i,iii

Question **6**

Correct

Mark 1.00 out of 1.00

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

a. False

b. True ✓

Your answer is correct.

The correct answer is:
True

Question **7**

Incorrect

Mark 0.00 out of 1.00

What will set1|set2 do?

```
If set1={"a","b",3}
set2={3,7}
```

a. A new set will be created with the elements of both set1 and set2

b. A new set will be created with the unique elements of set1 and set2.

c. Elements of set2 will get appended to set1 ✗

d. Elements of set1 will get appended to set2

Your answer is incorrect.

The correct answer is:
A new set will be created with the elements of both set1 and set2

Question **8**

Incorrect

Mark 0.00 out of 1.00

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))

a. 1 ✗

b. 5

c. Error

d. 2

Your answer is incorrect.

The correct answer is:
Error

Question **9**

Incorrect

Mark 0.00 out of 1.00

What is the output of the following union operation

```
set1 = {10, 20, 30, 40}
set2 = {50, 20, "10", 60}

set3 = set1.union(set2)
print(set3)
```

a. SynatxError: Different types cannot be used with sets

b. {40, 10, '10', 50, 20, 60, 30}

c. {40, '10', 50, 20, 60, 30} ✗

d. {40, 10, 50, 20, 60, 30}

Your answer is incorrect.

The correct answer is: {40, 10, '10', 50, 20, 60, 30}

Question **10**

Correct

Mark 1.00 out of 1.00

Choose the correct option.

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

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

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

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

Your answer is correct.

The correct answer is:
In Python, a tuple can contain both integers and strings as its elements.

Question **11**

Incorrect

Mark 0.00 out of 1.00

What will be the output of following Python code?

```
set1={2,5,3}

set2={3,1}

set3={}

set3=set1&set2

print(set3)
```

a. {2,5,1}

b. {2,5,3,1} ✗

c. {3}

d. {}

Your answer is incorrect.

The correct answer is:
{3}

Question **12**

Incorrect

Mark 0.00 out of 1.00

Which of the following Python code will create a set?

(i) set1=set((0,9,0))
(ii) set1=set([0,2,9])
(iii) set1={}

a. iii ✕
b. All of the above
c. i,ii
d. ii

Your answer is incorrect.

The correct answer is:
i,ii

Question **13**

Correct

Mark 1.00 out of 1.00

What is the output of the following

```
set1 = {1, 2, 3, 4, 5}
set2 = {6, 7, 1, 3, 4, 8, 2, 5}

print(set1.issubset(set2))
print(set2.issuperset(set1))
```

a. True
False

b. False
True

c. True ✓
True

d. False
False

Your answer is correct.

The correct answer is:

True
True

Question **14**

Correct

Mark 1.00 out of 1.00

Find the output of the given Python program?

```
t1 = (55, 44, 33, 22, 11)
x = [t1[i] for i in range(0, len(t1), 2)]
print(x)
```

a. (55,33,11)

b. [55, 33, 11] ✓

c. [(55,33,11)]

d. ([55,33,11])

Your answer is correct.

The correct answer is:
[55, 33, 11]

Question **15**

Correct

Mark 1.00 out of 1.00

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)]
```

a. [1, 4, 8] ✓

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

c. [2, 3, 9]

d. (1, 4, 8)

Your answer is correct.

The correct answer is:
[1, 4, 8]

◄ Set

Jump to...

Week7_Coding ►

Started on	Sunday, 9 June 2024, 10:12 PM
State	Finished
Completed on	Monday, 10 June 2024, 11:59 PM
Time taken	1 day 1 hour
Marks	5.00/5.00
Grade	**100.00** out of 100.00

Question **1**

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 %)

```
nums=list(map(int,input().split()))
duplicate=sum(nums)-sum(set(nums))
print(duplicate)
```

	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 **2**

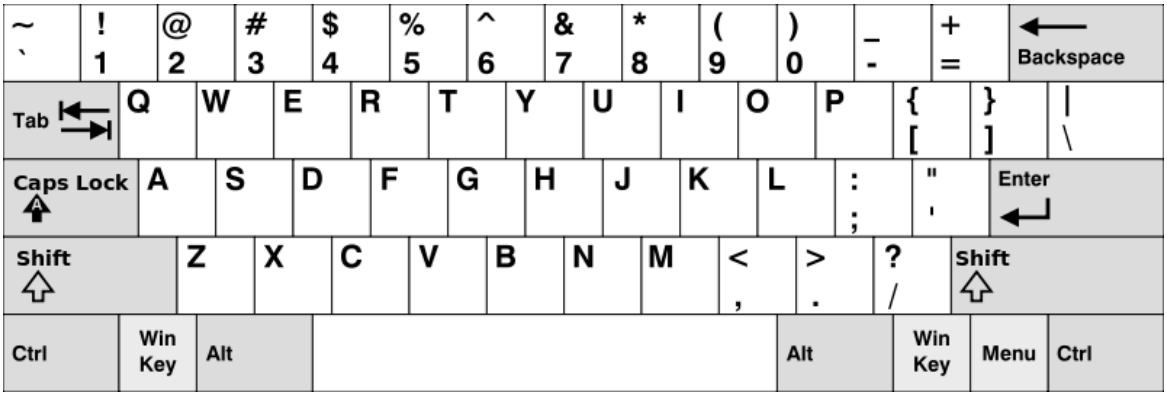
Correct

Mark 1.00 out of 1.00

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

In the **American keyboard**:

- the first row consists of the characters `"qwertyuiop"`,
- the second row consists of the characters `"asdfghjkl"`, and
- the third row consists of the characters `"zxcvbnm"`.



Example 1:

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

Example 2:

```
Input: words = ["omk"]
Output: []
```

Example 3:

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

For example:

Input	Result
4 Hello Alaska Dad Peace	Alaska Dad
2 adsfd afd	adsfd afd

Answer: (penalty regime: 0 %)

```
k={'q': 1, 'w': 1, 'e': 1, 'r': 1, 't': 1, 'y': 1, 'u': 1, 'i': 1, 'o': 1, 'p': 1,
'a': 2, 's': 2, 'd': 2, 'f': 2, 'g': 2, 'h': 2, 'j': 2, 'k': 2, 'l': 2,
'z': 3, 'x': 3, 'c': 3, 'v': 3, 'b': 3, 'n': 3, 'm': 3}

a=int(input())
l=[]
for i in range(a):
    b=(input())
    l.append(b)
r=[]
for i in l:
    if len(set(k[c.lower()] for c in i))==1:
```

```
        r.append(i)
for j in r:
    print(j)
if r==[]:
    print('No words')
```

	Input	Expected	Got	
✓	4 Hello Alaska Dad Peace	Alaska Dad	Alaska Dad	✓
✓	1 omk	No words	No words	✓
✓	2 adsfd afd	adsfd afd	adsfd afd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

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

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

Example 1:

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

Output:

1

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

For example:

Input	Result
hello world ad	1
Faculty Upskilling in Python Programming ak	2

Answer: (penalty regime: 0 %)

```
a=input()
b=input()
f=b.upper()
c=a.split(' ')
d=[]
e=[]
e.append(b)
e.append(f)
for i in c:
    for j in i:
        for k in e:
            if j in k:
                d.append(i)
g=set(d)
print(len(c)-len(g))
```

	Input	Expected	Got	
✓	hello world ad	1	1	✓
✓	Welcome to REC e	1	1	✓
✓	Faculty Upskilling in Python Programming ak	2	2	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **4**

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 %)

```
a=input()
b=int(input())
c=a.split(',')
d=len(c)
e=[]
for i in range(d):
    for k in range(1,d):
        f=[]
        g=(int(c[i])+int(c[k]))
        if g==b:
           f.append(int(c[i]))
           f.append(int(c[k]))
           f.sort()
           f=tuple(f)
           e.append(f)
h=set(e)
print(len(h))
```

	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 **5**

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 = "AAAAACCCCCAAAAACCCCCCAAAAAGGGTTT"
Output: ["AAAAACCCCC","CCCCCAAAAA"]
```

Example 2:

```
Input: s = "AAAAAAAAAAAAA"
Output: ["AAAAAAAAAA"]
```

For example:

Input	Result
AAAAACCCCCAAAAACCCCCCAAAAAGGGTTT	AAAAACCCCC CCCCCAAAAA

Answer: (penalty regime: 0 %)

```
s=input()
if len(s)<11:
    print('[]')
sequences={}
repeated_sequences=set()
for i in range(len(s)-9):
    sequence=s[i:i+10]
    if sequence in sequences:
        repeated_sequences.add(sequence)
    else:
        sequences[sequence]=1
d=list(repeated_sequences)
for i in d:
    print(i)
```

	Input	Expected	Got	
✓	AAAAACCCCCAAAAACCCCCCAAAAAGGGTTT	AAAAACCCCC CCCCCAAAAA	AAAAACCCCC CCCCCAAAAA	✓
✓	AAAAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ Week7_MCQ

Jump to...

Dictionary ►

a. True
b. False ✗

The correct answer is: True

Question **2**

Correct

Mark 1.00 out of 1.00

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

a. False
b. True ✓

The correct answer is: True

Question **3**

Correct

Mark 1.00 out of 1.00

Which of the following is an example of dictionary?

a. C = 
b. D = { } ✓
c. L = [ ]
d. None of the mentioned

The correct answer is: D = { }

Mark 1.00 out of 1.00

_____ function returns the number of key: value pairs of the dictionary.

- a. len ✓
- b. items
- c. total
- d. length

The correct answer is: len

Question **6**

Correct

Mark 1.00 out of 1.00

Keys in dictionary are _____.

- a. antique
- b. integers
- c. Mutable
- d. Immutable ✓

The correct answer is: Immutable

Keys of dictionary must be ____.

- a. integers
- b. antique
- c. unique ✓
- d. mutable

The correct answer is: unique

Question **9**

Correct

Mark 1.00 out of 1.00

Key – value concept is in ____.

- a. List
- b. Dictionary ✓
- c. Tuple
- d. String

The correct answer is: Dictionary

Mark 1.00 out of 1.00

Traversing a dictionary can be done using ____.

a. if statement
b. jump statement
c. loop ✓
d. None of the mentioned

The correct answer is: loop

Question **12**

Correct

Mark 1.00 out of 1.00

All elements in dictionary are separated by ____.

a. Semicolon(;)
b. Comma(,) ✓
c. Colon (
d. dot(.)

The correct answer is: Comma(,)

Mark 0.00 out of 1.00

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

- a. append
- b. merge ✗
- c. get
- d. update

The correct answer is: update

Question **15**

Correct

Mark 1.00 out of 1.00

Which of the following is used to delete an element from Dictionary?

- a. remove
- b. None of the mentioned
- c. pop ✓
- d. delete

The correct answer is: pop

◄ Dictionary

Jump to...

Week8_Coding ►

Started on	Sunday, 9 June 2024, 10:16 PM
State	Finished
Completed on	Monday, 10 June 2024, 11:59 PM
Time taken	1 day 1 hour
Marks	5.00/5.00
Grade	**100.00** out of 100.00

Question 1

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 %)

```
letter_values = {
    'A': 1, 'E': 1, 'I': 1, 'L': 1, 'N': 1, 'O': 1, 'R': 1, 'S': 1, 'T': 1, 'U': 1,
    'D': 2, 'G': 2,
    'B': 3, 'C': 3, 'M': 3, 'P': 3,
    'F': 4, 'H': 4, 'V': 4, 'W': 4, 'Y': 4,
    'K': 5,
    'J': 8, 'X': 8,
    'Q': 10, 'Z': 10
}
word = input()
score = sum(letter_values.get(letter.upper(), 0) for letter in word)
print(f"{word} is worth {score} points.")
```

	Input	Expected	Got	
✓	GOD	GOD is worth 5 points.	GOD is worth 5 points.	✓

	Input	Expected	Got	
✓	REC	REC is worth 5 points.	REC is worth 5 points.	✓

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 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 %)

```
try:
    n=int(input())
    votes_dict={}
    for _ in range(n):
        candidate = input()
        if candidate in votes_dict:
            votes_dict[candidate] += 1
        else:
            votes_dict[candidate] = 1
```

```
    max_votes = max(votes_dict.values())
    winners = [candidate for candidate, votes in votes_dict.items() if votes == max_votes]
    winner = min(winners)
    print(winner)
except eoferror:
    print("No input provided.")
```

	Input	Expected	Got	
✓	10 John John Johny Jamie Jamie Johny Jack Johny Johny Jackie	Johny	Johny	✓
✓	6 Ida Ida Ida Kiruba Kiruba Kiruba	Ida	Ida	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

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

s1 and s2 consist of lowercase English letters and spaces.

s1 and s2 do not have leading or trailing spaces.

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

Note:

Use dictionary to solve the problem

For example:

Input	Result
this apple is sweet this apple is sour	sweet sour

Answer: (penalty regime: 0 %)

```
a = input().split()
b = input().split()
s = []

if a[0]!=b[0]:
    for i in b:
        print(i,end=" ")
else:
    for i in a:
        if i not in b:
            s.append(i)
    for i in b:
        if i not in a:
            s.append(i)
    for i in s:
        print(i,end=" ")
```

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

	Input	Expected	Got	
✓	apple apple banana	banana	banana	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

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 as the highest Assignment marks

3.Identify the student with the Lowest lab marks

4.Identify the student with the lowest average score

Note:

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

Sample input:

4

James 67 89 56

Lalith 89 45 45

Ram 89 89 89

Sita 70 70 70

Sample Output:

Ram

James Ram

Lalith

Lalith

For example:

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

Answer: (penalty regime: 0 %)

```
n = int(input())
input_lines = [input() for i in range(n)]
lines_split = [input_lines[i].split(" ") for i in range(len(input_lines))]

student_names = []

for i in range(len(lines_split)):
    student_names.append(lines_split[i][0])

test_mark = []
assignment_mark = []
lab_mark = []

for i in range(len(lines_split)):
    test_mark.append(int(lines_split[i][1]))
    assignment_mark.append(int(lines_split[i][2]))
    lab_mark.append(int(lines_split[i][3]))
average = []
for i in range(len(lines_split)):
```

```
    average.append((test_mark[i]+assignment_mark[i]+lab_mark[i])//3)

max_average = max(average)
max_assignment = max(assignment_mark)
min_lab_mark = min(lab_mark)
min_average = min(average)

index_max_average = []
index_max_assignment = []
index_min_lab_mark = []
index_min_average = []

for i in range(len(average)):
    if average[i] == max_average:
        index_max_average.append(i)
    if average[i] == min_average:
        index_min_average.append(i)

for i in range(len(assignment_mark)):
    if assignment_mark[i] == max_assignment:
        index_max_assignment.append(i)
for i in range(len(lab_mark)):
    if lab_mark[i] == min_lab_mark:
        index_min_lab_mark.append(i)
ans1 = []
ans2 = []
ans3 = []
ans4 = []

for i in index_max_average:
    ans1.append(student_names[i])
for i in index_max_assignment:
    ans2.append(student_names[i])
```

	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 5

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 6 7 4 Best 7 6 5	Gfg 17 Best 18

Answer: (penalty regime: 0 %)

```
try:
    T = int(input())
    result_dict = {}
    for _ in range(T):
        key, *values = input().split()
        values = list(map(int, values))
        sum_values = sum(values)
        result_dict[key] = sum_values
    sorted_result = dict(sorted(result_dict.items(), key=lambda item: item[1]))
    for key, value in  sorted_result.items():
        print(key, value)
except EOFError:
    print("No input provided,")
```

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

	Input	Expected	Got	
✓	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.

◄ Week8_MCQ

Jump to...

Functions ►

Started on	Monday, 10 June 2024, 10:24 PM
State	Finished
Completed on	Monday, 10 June 2024, 10:29 PM
Time taken	4 mins 46 secs
Grade	**7.00** out of 15.00 (**46.67**%)

Question **1**

Correct

Mark 1.00 out of 1.00

Which of the following items are present in the function header?

a. parameter list

b. Both A and B ✓

c. function name

d. return value

Your answer is correct.

The correct answer is:
Both A and B

Question **2**

Correct

Mark 1.00 out of 1.00

Python function always returns a value

Select one:

True ✓

False

The correct answer is 'True'.

Question **3**

Incorrect

Mark 0.00 out of 1.00

What will be the output of the following Python code?

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

a. 7

b. Infinite loop ✗

c. 17

d. 13

Your answer is incorrect.

The correct answer is:
17

Question **4**

Incorrect

Mark 0.00 out of 1.00

Which of the following is not the type of function argument?

a. initial argument

b. default argument

c. Keyword argument

d. Required argument ✗

The correct answer is: initial argument

Question **5**

Correct

Mark 1.00 out of 1.00

The _____ statement returns the values from the function to the calling function.

a. send

b. give

c. return ✓

d. take

The correct answer is: return

Question **6**

Incorrect

Mark 0.00 out of 1.00

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

- a. Function Variable ✗
- b. Local variable
- c. inside variable
- d. Global variable

The correct answer is: Local variable

Question **7**

Incorrect

Mark 0.00 out of 1.00

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

- a. 7
- b. [7]
- c. [4, 5, 6]
- d. [1, 2, 3, 4] ✗

The correct answer is: [7]

Question **8**

Correct

Mark 1.00 out of 1.00

Which keyword is used for defining a function?

- a. Function
- b. Fun
- c. Define
- d. def ✓

Your answer is correct.

The correct answer is:
def

Question **9**

Incorrect

Mark 0.00 out of 1.00

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))
```

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

b. fact(n)*fact(n-1) ✗

c. n*(n-1)

d. (n-1)*(n-2)

Your answer is incorrect.

The correct answer is:
(n * factorial(n - 1))

Question **10**

Correct

Mark 1.00 out of 1.00

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

a. 100 ✓

b. 1

c. 0

d. 99

The correct answer is: 100

Question **11**

Incorrect

Mark 0.00 out of 1.00

Which of the following function definition header is wrong?

a. def div(p1=4, p2, p3):
b. def mul(p1, n1, m1):
c. def scan(p1, p2 = 4, p3 = 5): ✗
d. def sum(n1, n2, n = 3):

The correct answer is: def div(p1=4, p2, p3):

Question **12**

Correct

Mark 1.00 out of 1.00

The return statement in function is used to _____.

a. Both return value and returns the control to the calling function ✓
b. returns the control to the calling function
c. None of the mentioned
d. return value

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

Question **13**

Correct

Mark 1.00 out of 1.00

Write the output of : print(min(tuple("computer")))

a. c ✓
b. u
c. t
d. o

The correct answer is: c

Question **14**

Incorrect

Mark 0.00 out of 1.00

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

a. scope
b. module
c. part
d. none of the mentioned ✗

The correct answer is: scope

Question **15**

Incorrect

Mark 0.00 out of 1.00

What will be the output of the following Python code?

```
def sayHello():
    print('Hello World!')
sayHello()
sayHello()
```

a. Hello ✗
Hello

b. 'Hello World!'
'Hello World!'

c. None of the mentioned

d. Hello World!
Hello World!

Your answer is incorrect.

The correct answer is:
Hello World!
Hello World!

◄ Functions

Jump to...

Week9_Coding ►

Started on	Monday, 17 June 2024, 5:37 PM
State	Finished
Completed on	Monday, 17 June 2024, 6:08 PM
Time taken	30 mins 48 secs
Marks	5.00/5.00
Grade	**100.00** out of 100.00

Question **1**

Correct

Mark 1.00 out of 1.00

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

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

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

Input Format:

Integer input from stdin.

Output Format:

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

Example Input:

16

Output:

4

Explanation:

We need only 4 coins of value 4 each

Example Input:

25

Output:

7

Explanation:

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

Answer: (penalty regime: 0 %)

Reset answer

```
def coinChange(target):
    coins=[1, 2, 3, 4]
    dp=[float('inf')] * (target+1)
    dp[0]=0
    for i in range(1,target + 1):
        for coin in coins:
            if coin <=i:
                dp[i]=min(dp[i],dp[i-coin]+1)
    return dp[target]
```

	Test	Expected	Got	
✓	print(coinChange(16))	4	4	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

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 <= orderValue< 10e100000

Input

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

Output

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

Example Input

578

Output

12

For example:

Test	Result
`print(christmasDiscount(578))`	`12`

Answer: (penalty regime: 0 %)

Reset answer

```
def christmasDiscount(n):
    s=0
    for i in str(n):
        if i in '2357':
            s+=int(i)
    return s

```

	Test	Expected	Got	
✓	`print(christmasDiscount(578))`	12	12	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **3**

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

```
def differenceSum(n):
    s=str(n)
    e=0;o=0
    for i in range(len(s)):
        if(i%2!=0):
            e+=int(s[i])
        else:
            o+=int(s[i])
        return abs(e-o)
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **4**

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*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

```
def automorphic(n):
    if not isinstance(n,int):
        return"Invalid input"
    square=n*n
    str_n=str(n)
    str_square=str(square)
    if str_square.endswith(str_n):
        return"Automorphic"
    else:
        return"Not Automorphic"
    return s

```

	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 **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

```
def checkUgly(n):
    while(n%2==0):
        n//=2
    while(n%3==0):
        n//=3
    while(n%5==0):
        n//=5
    if (n==1):
        return "ugly"
    else:
        return "not ugly"
```

	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.

◄ Week9_MCQ

Jump to...

Searching ►

Started on	Monday, 10 June 2024, 11:44 PM
State	Finished
Completed on	Monday, 10 June 2024, 11:47 PM
Time taken	2 mins 55 secs
Grade	**5.00** out of 15.00 (**33.33**%)

Question **1**

Incorrect

Mark 0.00 out of 1.00

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?

a. 94 and 99

b. 90 and 99

c. 89 and 94 ✗

d. 90 and 100

Your answer is incorrect.

The correct answer is:
90 and 99

Question **2**

Incorrect

Mark 0.00 out of 1.00

Two-way merge sort algorithm is used to sort the following elements in ascending order.
200,470,150,80,90,40,400,300,120,70
What is the order of these elements after second pass of the merge sort algorithm?

a. 40,80,90,150,200,300,400,470,70,120

b. 40,70,80,90,120,150,200,300,400,470 ✗

c. 200,470,80,150,40,90,300,400,70,120

d. 80,150,200,470,40,90,300,400,70,120

Your answer is incorrect.

The correct answer is:
80,150,200,470,40,90,300,400,70,120

Mark 1.00 out of 1.00

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

a. There must be a mechanism to delete and/or insert elements in the list ✓

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

c. The list must be sorted

d. Number values should only be present

Number values should only be present

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

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

a. Insertion

b. Selection

c. Complexity

d. Bubble ✓

Your answer is correct.

The correct answer is: Bubble

Mark 1.00 out of 1.00

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

a. Mining
b. Finding
c. Searching ✓
d. Discovering

Your answer is correct.

The correct answer is:
Searching

Question **6**

Incorrect

Mark 0.00 out of 1.00

_____ search takes a sorted/ordered list and divides it in the middle.

a. Hash ✗
b. Both (1) & (3)
c. Binary
d. Linear

Your answer is incorrect.

The correct answer is:
Binary

Question **7**

Correct

Mark 1.00 out of 1.00

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

a. Merging
b. Searching
c. Rearranging
d. Sorting ✓

Your answer is correct.

The correct answer is: Sorting

Mark 0.00 out of 1.00

Algorithm design technique used in merge sort algorithm is

a. Greedy method
b. Divide and conquer
c. Dynamic programming ✕
d. Backtracking

Your answer is incorrect.

The correct answer is:
Divide and conquer

Question **9**

Incorrect

Mark 0.00 out of 1.00

Very slow way of sorting is_____

a. Heap sort ✕
b. Quick sort
c. Bubble sort
d. Insertion sort

Your answer is incorrect.

The correct answer is:
Insertion sort

Mark 1.00 out of 1.00

In _____ checks the elements of a list, one at a time, without skipping any element.

a. Both (1) & (3)

b. Linear search ✓

c. Hash search

d. Binary search

Your answer is correct.

The correct answer is:
Linear search

Question **11**

Incorrect

Mark 0.00 out of 1.00

What is mean by stable sorting algorithm?

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

b. A sorting algorithm is stable if it doesn't preserver 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

Your answer is incorrect.

The correct answer is:
A sorting algorithm is stable if it preserves the order of duplicate keys

Question **12**

Incorrect

Mark 0.00 out of 1.00

The average case occurs in the linear search algorithm

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

b. When the item is the last element in the array

c. When the item is not the array at all

d. When the item is somewhere in the middle of the array

Your answer is incorrect.

The correct answer is:
When the item is somewhere in the middle of the array

Mark 0.00 out of 1.00

_____is putting an element in the appropriate place in a sorted list yields a larger sorted order list.

- a. Distribution ✗
- b. Selection
- c. Extraction
- d. Insertion

Your answer is incorrect.

The correct answer is:
Insertion

Question **14**

Incorrect

Mark 0.00 out of 1.00

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

- a. Complexity
- b. Sorting
- c. Merging
- d. Searching ✗

Your answer is incorrect.

The correct answer is:
Complexity

Question **15**

Incorrect

Mark 0.00 out of 1.00

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

- a. Must use a sorted array
- 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. Requirement of sorted array is expensive when a lot of insertion and deletions are needed

Your answer is incorrect.

The correct answer is:
Binary search algorithm is not efficient when the data elements more than 1500

5
8 9 10 2 6

Sample Output

```
10 6
```

For example:

Input	Result
4 12 3 6 8	12 8

Answer: (penalty regime: 0 %)

```
a = int(input())
li = input().split()
li = [int(i) for i in li]
ans = []
for i in range(a):
    if i+1 < a:
        if li[i] > li[i+1] and li[i]>li[i-1]:
            # ans.append(li[i])
            print(li[i],end=" ")

    elif i+1==a:
        if li[i]>li[i-1]:
            print(li[i],end=" ")
# print(ans)
```

	Input	Expected	Got	
✓	7 15 7 10 8 9 4 6	15 10 9 6	15 10 9 6	✓
✓	4 12 3 6 8	12 8	12 8	✓

Answer: (penalty regime: 0 %)

```
m=input()
n=int(input())
s=m.split(',')
l=[]
for j in s:
    j=int(j)
    if j not in l:
        l.append(j)
a=0
b=len(l)
while(a<=b):
    c=(a+b)//2
    if l[c]>n:
        b=c-1
    elif l[c]<n:
        a=c+1
    else:
        print('True')
```

	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.

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 %)

```
a=input()
b=input()
c=int(input())
d=list(map(int,b.split(" ")))
for i in d:
    for j in d:
        if i+j==c and i!=j:
            print("Yes")
            break
    if i+j==c and i!=j:
        break
else:
    print("No")
```

```
print(*d,sep=" ")
```

	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.

For example:

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

Answer: (penalty regime: 0 %)

```
def find_frequencies(arr):
    frequency = {}
    for num in arr:
        if num in frequency:
            frequency[num] += 1
        else:
            frequency[num] = 1
    sorted_frequency = sorted(frequency.items())
    return sorted_frequency

arr = list(map(int, input().split()))
frequencies = find_frequencies(arr)
for num, freq in frequencies:
    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	✓