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**Started on** Thursday, 14 March 2024, 1:42 PM

**State** Finished

**Completed on** Thursday, 14 March 2024, 1:54 PM

**Time taken** 11 mins 39 secs

**Grade** 9.00 out of 10.00 (90%)

Question 1

Correct

Mark 1.00 out of 1.00

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

- ☒ a. `print()` ✓
- ☐ b. `val()`
- ☐ c. `printf()`
- ☐ d. `scanf()`

Your answer is correct.

The correct answer is:

`print()`

Question 2

Correct

Mark 1.00 out of 1.00

What will be the output of the following code snippet?

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

- ☐ a. `int`
- ☐ b. `obj`
- ☒ c. `float` ✓
- ☐ d. `str`

Your answer is correct.

The correct answer is:

`float`

## Question 3

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. float and str
- ☐ b. int and int
- ☒ c. int and str ✓
- ☐ d. No output

Your answer is correct.

The correct answer is:  
int and str

## Question 4

Correct

Mark 1.00 out of 1.00

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

- ☐ a. .cpp
- ☒ b. .py ✓
- ☐ c. .python
- ☐ d. .p

Your answer is correct.

The correct answer is:  
.py

Question **5**

Correct

Mark 1.00 out of 1.00

Which of the following declarations is incorrect in python language?

- ☐ a. `xyzp = 5,000,000`
- ☒ b. `x,y,z,p = 5000, 6000, 7000, 8000` ✓
- ☐ c. `x_y_z_p = 5,000,000`
- ☐ d. `x y z p = 5000 6000 7000 8000`

Your answer is correct.

The correct answer is:

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

Question **6**

Correct

Mark 1.00 out of 1.00

Who developed the Python language?

- ☐ a. Dennis Ritchie
- ☒ b. Guido Van Rossum ✓
- ☐ c. Bill Gates
- ☐ d. Von Neumann

Your answer is correct.

The correct answer is:

Guido Van Rossum

Question **7**

Incorrect

Mark 0.00 out of 1.00

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

Answer:

✗

The correct answer is: `float(input())`

## Question 8

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. 3 1 ✓  
1 3
- ☐ b. 3 1  
3 1
- ☐ c. No output
- ☐ d. 1 3  
3 1

Your answer is correct.

The correct answer is:

3 1

1 3

## Question 9

Correct

Mark 1.00 out of 1.00

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

- ☒ a. Indentation ✓
- ☐ b. Curly brace
- ☐ c. Key
- ☐ d. Parenthesis

Your answer is correct.

The correct answer is:

Indentation

Question **10**

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. str
- ☐ c. class str
- ☒ d. <class 'str'> ✓

Your answer is correct.

The correct answer is:

<class 'str'>

[◀ Basics of Python](#)

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- ☐ c. `printf()`
- ☐ d. `scanf()`

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The correct answer is:

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Question 2

Correct

Mark 1.00 out of 1.00

What will be the output of the following code snippet?

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

- ☐ a. `int`
- ☐ b. `obj`
- ☒ c. `float` ✓
- ☐ d. `str`

Your answer is correct.

The correct answer is:

`float`

## Question 3

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. float and str
- ☐ b. int and int
- ☒ c. int and str ✓
- ☐ d. No output

Your answer is correct.

The correct answer is:  
int and str

## Question 4

Correct

Mark 1.00 out of 1.00

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

- ☐ a. .cpp
- ☒ b. .py ✓
- ☐ c. .python
- ☐ d. .p

Your answer is correct.

The correct answer is:  
.py

Question **5**

Correct

Mark 1.00 out of 1.00

Which of the following declarations is incorrect in python language?

- ☐ a. `xyzp = 5,000,000`
- ☒ b. `x,y,z,p = 5000, 6000, 7000, 8000` ✓
- ☐ c. `x_y_z_p = 5,000,000`
- ☐ d. `x y z p = 5000 6000 7000 8000`

Your answer is correct.

The correct answer is:

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

Question **6**

Correct

Mark 1.00 out of 1.00

Who developed the Python language?

- ☐ a. Dennis Ritchie
- ☒ b. Guido Van Rossum ✓
- ☐ c. Bill Gates
- ☐ d. Von Neumann

Your answer is correct.

The correct answer is:

Guido Van Rossum

Question **7**

Incorrect

Mark 0.00 out of 1.00

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

Answer:

✗

The correct answer is: `float(input())`



## Question 8

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. 3 1 ✓  
1 3
- ☐ b. 3 1  
3 1
- ☐ c. No output
- ☐ d. 1 3  
3 1

Your answer is correct.

The correct answer is:

3 1

1 3

## Question 9

Correct

Mark 1.00 out of 1.00

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

- ☒ a. Indentation ✓
- ☐ b. Curly brace
- ☐ c. Key
- ☐ d. Parenthesis

Your answer is correct.

The correct answer is:

Indentation

Question **10**

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. str
- ☐ c. class str
- ☒ d. <class 'str'> ✓

Your answer is correct.

The correct answer is:

<class 'str'>

[◀ Basics of Python](#)

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Started on	Thursday, 28 March 2024, 2:45 PM
State	Finished
Completed on	Sunday, 14 April 2024, 11:23 PM
Time taken	17 days 8 hours
Overdue	15 days 8 hours
Marks	16.00/19.00
Grade	84.21 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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

Sample Input

100

Sample Output

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

For example:

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

Answer: (penalty regime: 0 %)

```
1 amt = int(input())
2 tax = 0.05 * amt
3 tip = 0.18 * amt
4 total = amt + tax + tip
5 print(f"The tax is {tax:.2f} and the tip is {tip:.2f}, making the total {total:.2f}")
```

	Input	Expected	Got	
✓	100	The tax is 5.00 and the tip is 18.00, making the total 123.00	The tax is 5.00 and the tip is 18.00, making the total 123.00	✓
✓	250	The tax is 12.50 and the tip is 45.00, making the total 307.50	The tax is 12.50 and the tip is 45.00, making the total 307.50	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

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

Hint:

Use ASCII values of C and D.

Input Format:

An integer x, 0<=x<=1. .

Output Format:

output a single character "C" or "D"depending on the value of x.

Input 1:

0

Output 1:

C

Input 2:

1

Output 1:

D

For example:

Input	Result
0	C

Answer: (penalty regime: 0 %)

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

	Input	Expected	Got	
✓	0	C	C	✓

	Input	Expected	Got	
✓	1	D	D	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Incorrect

Mark 0.00 out of 1.00

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

Sample Input

3

Sample Output:

2

Explanation:

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

For example:

Input	Result
3	2

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 d1=n&
```

Syntax Error(s)

File "\_\_tester\_\_.python3", line 2  
d1=n&  
^  
SyntaxError: invalid syntax

Incorrect

Marks for this submission: 0.00/1.00.

Question 4

Not answered

Mark 0.00 out of 1.00

Pretend that you have just opened a new savings account that earns 4 percent interest per year. The interest that you earn is paid at the end of the year, and is added to the balance of the savings account. Write a program that begins by reading the amount of money deposited into the account from the user. Then your program should compute and display the amount in the savings account after 1, 2, and 3 years. Display each amount so that it is rounded to 2 decimal places. Sample Input: 10000 Sample Output: Balance as of end of Year 1: \$10400.00. Balance as of end of Year 2: \$10816.00. Balance as of end of Year 3: \$11248.64.

For example:

Input	Result
10000	Balance as of end of Year 1: \$10400.00. Balance as of end of Year 2: \$10816.00. Balance as of end of Year 3: \$11248.64.

Answer: (penalty regime: 0 %)

1

Question **5**

Correct

Mark 1.00 out of 1.00

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

Sample Input

10

Sample Output

True

Explanation:

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

For example:

Input	Result
101	False

Answer: (penalty regime: 0 %)

```
1 a=int(input())
2 print(a%2==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.



Question 6

Not answered

Mark 0.00 out of 1.00

Note:

Dont use if-else. [Operators](#) alone must be used .

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

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

Input Format:

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

Output Format:

Display True(IF ELIGIBLE)

Display False (if not eligible)

Sample Input

19

45

Sample Output

True

For example:

Input	Result
18 40	False

Answer: (penalty regime: 0 %)

1

Question 7

Correct

Mark 1.00 out of 1.00

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

Input format:

Line 1 has the total number of weapons

Line 2 has the total number of Soldiers.

Output Format:

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

Sample Input:

32

43

Sample Output:

False

For example:

Input	Result
32	False
43	

Answer: (penalty regime: 0 %)

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

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

	Input	Expected	Got	
✓	6789 32996	True	True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 10.00 out of 10.00

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

[Sample](#) Input:

10  
20

[Sample](#) Output:

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

Answer: (penalty regime: 0 %)

```
1 a=int(input())
2 b=int(input())
3 c=75
4 d=112
5 totalweight=(a*c)+(b*d)
6 print("The total weight of all these widgets and gizmos is",totalweight,"grams.")
```

	Input	Expected	Got	
✓	10 20	The total weight of all these widgets and gizmos is 2990 grams.	The total weight of all these widgets and gizmos is 2990 grams.	✓

Passed all tests! ✓

Correct

Marks for this submission: 10.00/10.00.

Question 9

Correct

Mark 1.00 out of 1.00

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

Input Given:

N-No of friends

P1,P2,P3 AND P4-No of chocolates

OUTPUT:

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

SAMPLE INPUT AND OUTPUT:

5  
25  
12  
10  
9

OUTPUT

True False True False

For example:

Input	Result
5	True
25	False
23	True
20	True
10	

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 p1=int(input())
3 p2=int(input())
4 p3=int(input())
5 p4=int(input())
6 print(p1%n==0,end=" ")
7 print(p2%n==0,end=" ")
8 print(p3%n==0,end=' ')
9 print(p4%n==0,end=' ')
10
11
```

	Input	Expected	Got	
✓	5 25 23 20 10	True False True True	True False True True	✓
✓	4 23 24 21 12	False True False True	False True False True	✓
✓	8 64 8 16 32	True True True True	True True True True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

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

The last digit should be returned as a positive number.

For example,

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

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

For example:

Input	Result
197	7
-197	7

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 b=abs(n)
3 print(b%10)
4
```

	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 ▶](#)

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**Started on** Tuesday, 16 April 2024, 10:09 PM

**State** Finished

**Completed on** Tuesday, 16 April 2024, 10:12 PM

**Time taken** 3 mins

**Grade** 11.00 out of 15.00 (73.33%)

Question 1

Correct

Mark 1.00 out of 1.00

What is the output of the below code snippet?

```
num1=100
num2=200
num3=6
if(5>=num3):
    if(num1>100 or num2>150):
        print("1")
elif(num1>=100 and num2>150):
    print("2")
else:
    print("3")
```

- ☐ a. 1
- ☐ b. 3
- ☒ c. 2 ✓

Your answer is correct.

The correct answer is:

2

## Question 2

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. Nested if
- ☒ b. If ✖
- ☐ c. if elif
- ☐ d. if else

Your answer is incorrect.

The correct answer is:  
if else

## Question 3

Correct

Mark 1.00 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=11, num2=2
- ☐ b. num1=-10,num2=2
- ☒ c. num1=5, num2=1 ✔
- ☐ d. num1=0, num2=5

Your answer is correct.

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



## Question 4

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. Compiled Successfully, No Output.
- ☐ b. Hello
- ☒ c. REC ✓

Your answer is correct.

The correct answer is:

**REC**

## Question 5

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. No output ✗  
REC
- ☐ b. REC
- ☐ c. false  
REC
- ☐ d. REC  
REC

Your answer is incorrect.

The correct answer is:

**REC**

Question **6**

Correct

Mark 1.00 out of 1.00

Can we write if/else into one line in python?

- ☐ a. No
- ☒ b. Yes ✓

Your answer is correct.

The correct answer is:  
Yes

Question **7**

Correct

Mark 1.00 out of 1.00

What will be the output for the following code?

if False:

print("1001")

else:

print("2002")

- ☒ a. 2002 ✓
- ☐ b. syntax error
- ☐ c. 1001

Your answer is correct.

The correct answer is:  
2002

Question 8

Correct

Mark 1.00 out of 1.00

Write the output of the following code :

```
y=2
```

```
if 2!=y:
```

```
    print("H")
```

```
else :
```

```
    print("K")
```

- ☐ a. H
- ☒ b. K ✓
- ☐ c. Error
- ☐ d. No output

Your answer is correct.

The correct answer is:

K

Question 9

Correct

Mark 1.00 out of 1.00

what will be the output for the following question?

```
a, b = 12, 5
```

```
if a + b:
```

```
    print('True')
```

```
else:
```

```
    print('False')
```

- ☐ a. False
- ☐ b. Error
- ☒ c. True ✓

Your answer is correct.

The correct answer is:

True

## Question 10

Correct

Mark 1.00 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. 11
- ☐ c. 33
- ☐ d. 22

Your answer is correct.

The correct answer is:

44

## Question 11

Correct

Mark 1.00 out of 1.00

With what extension are the python [files](#) saved?

- ☐ a. .python
- ☐ b. .pyn
- ☒ c. .py ✓
- ☐ d. .p

Your answer is correct.

The correct answer is:

.py

## Question 12

Correct

Mark 1.00 out of 1.00

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

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

Your answer is correct.

The correct answer is:

**indentation**

## Question 13

Incorrect

Mark 0.00 out of 1.00

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

- ☐ a. **absent**
- ☐ b. **Runtime Error**
- ☒ c. **compilation error** ✗
- ☐ d. **present**

Your answer is incorrect.

The correct answer is:

**present**

Question **14**

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("Know Program")
```

- ☐ a. Error
- ☐ b. Hello
- ☒ c. Know Program ✓
- ☐ d. Compiled Successfully, No Output

Your answer is correct.

The correct answer is:

Know Program

Question **15**

Incorrect

Mark 0.00 out of 1.00

```
if true:  
    print("Hello World")
```

- ☐ a. Name Error
- ☒ b. Hello World ✗
- ☐ c. No output

Your answer is incorrect.

The correct answer is:

Name Error

[◀ Selection control structures](#)

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Started on	Thursday, 18 April 2024, 12:58 PM
State	Finished
Completed on	Thursday, 25 April 2024, 2:53 PM
Time taken	7 days 1 hour
Overdue	5 days 1 hour
Marks	10.00/10.00
Grade	100.00 out of 100.00

Question 1

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 %)

```
1 number=int(input())
2 length=len(str(number))
3 temp=number
4 sum=0
5 rem=0
6 while temp>0:
7     rem=temp%10
8     sum=sum+int(rem**length)
9     temp=temp//10
10    length=length-1
11 if sum==number:
12     print("Yes")
13 else:
14     print("No")
```

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

Passed all tests! ✓

Correct



Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

Write a program to find the 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 %)

```
1 n=int(input())
2 sum=0
3 j=0
4 for i in range(0,n):
5     sum=sum+(10**i)
6     j=j+sum
7 print(j)
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

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 %)

```
1 n=int(input())
2 n=n+1
3 s=int(n**0.5)
4 if(s*s==n):
5     print("Yes")
6 else:
7     print("No")
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

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 %)

```
1 n=int(input())
2 d=int(n/2)
3 c=0
4 for i in range(1,10):
5     for j in range(1,10):
6         if(i*j==n):
7             print("Yes")
8             c=c+1
9             break
10        if(c!=0):
11            break
12 if(c==0):
13     print("No")
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Write a program that finds whether the given number N is Prime or not.  
If the number is prime, the program should return 2 else it must return 1.  
Assumption:  $2 \leq N \leq 5000$ , where N is the given number.  
Example1: if the given number N is 7, the method must return 2  
Example2: if the given number N is 10, the method must return 1

For example:

Input	Result
7	2
10	1

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 a=0
3 for i in range(2,n):
4     if n%i==0:
5         a=1
6         break
7 if a==0:
8     print("2")
9 else:
10    print("1")
11
```

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

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,

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

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

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

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

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

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

Assumptions for this program:

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

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

For example:

Input	Result
5	120
4	24
9	362880

Answer: (penalty regime: 0 %)

```
1 | n=int(input())
2 | fac=1
3 | for i in range(1,n+1):
4 |     fac=fac*i
5 | print(fac)
6 |
```

	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 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  $\geq 1$  and  $\leq 25000$ .

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 %)

```
1 a=input()
2 d={}
3 for i in a:
4     if i not in d:
5         d[i]=0
6 print(len(d.keys()))
```

	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 8

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  $\geq 1$  and  $\leq 25000$ .

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 %)

```
1 a=input()
2 d={}
3 for i in a:
4     if i in d:
5         d[i]=1
6     else:
7         d[i]=0
8 l=d.keys()
9 c=0
10 for i in l:
11     if d[i]==0:
12         c+=1
13 print(c)
```

	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 9

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 %)

```
1 import math
2 n=int(input())
3 while True:
4     n=n+1
5     s=int(math.sqrt(n))
6     if s*s==n:
7         print(n)
8         break
```

	Input	Expected	Got	
✓	10	16	16	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.



Question 10

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 %)

```
1 n=int(input())
2 a=-1
3 b=1
4 for i in range(1,n+1):
5     c=a+b
6     a=b
7     b=c
8 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.

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**Started on** Thursday, 23 May 2024, 6:56 AM

**State** Finished

**Completed on** Thursday, 23 May 2024, 7:11 AM

**Time taken** 14 mins 19 secs

**Grade** 5.00 out of 15.00 (33.33%)

Question 1

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 2

Incorrect

Mark 0.00 out of 1.00

What is the output of the following?

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

- ☒ a. 0 1 2 ✖
- ☐ b. 0 1 2 3 0
- ☐ c. 0 1 2 0
- ☐ d. Error

Your answer is incorrect.

The correct answer is:

0 1 2 0

## Question 3

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
my_string = 'arvijayakumar'
for i in range(my_string):
    print(i)
```

- ☒ a. arvjayakumar ✖
- ☐ b. None
- ☐ c. Error
- ☐ d. 0 1 2 3 ... 12
- 1.

Your answer is incorrect.

The correct answer is:

Error

## Question 4

Incorrect

Mark 0.00 out of 1.00

What will be the output of below Python code?

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

Answer: formation ✖

The correct answer is: format

## Question 5

Incorrect

Mark 0.00 out of 1.00

What is the output of the following Code?

```
str1="6/4"
print("str1")
```

Answer: 6/4 ✖

The correct answer is: str1

## Question 6

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

```
print('Ab!2'.swapcase())
```

- ☐ a. aB1@
- ☒ b. aB!2 ✓
- ☐ c. ab12
- ☐ d. AB!@

Your answer is correct.

The correct answer is:

aB!2

## Question 7

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

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

- ☐ a. 'r'
- ☐ b. None of the above
- ☒ c. ramukayajiv ✗
- ☐ d. vijayakuma

Your answer is incorrect.

The correct answer is:

'r'

## Question 8

Incorrect

Mark 0.00 out of 1.00

What arithmetic [operators](#) cannot be used with [strings](#) in Python?

- ☐ a. All of the mentioned
- ☐ b. -
- ☐ c. +
- ☒ d. \* ✖

Your answer is incorrect.

The correct answer is:

-

## Question 9

Incorrect

Mark 0.00 out of 1.00

Python considered the character enclosed in triple quotes as String.

Select one:

- ☐ True
- ☒ False ✖

The correct answer is 'True'.

## Question 10

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
print('ab cd ef'.title())
```

- ☐ a. None of the mentioned
- ☒ b. Ab cd ef ✖
- ☐ c. Ab Cd Ef
- ☐ d. Ab cd eF

Your answer is incorrect.

The correct answer is:

Ab Cd Ef

## Question 11

Incorrect

Mark 0.00 out of 1.00

Which of the following is False?

- ☐ a. capitalize() function in string is used to return a string by converting the whole given string into uppercase.
- ☐ b. lower() function in string is used to return a string by converting the whole given string into lowercase.
- ☒ c. None of the mentioned ✖
- ☐ d. String is immutable.

Your answer is incorrect.

The correct answer is:

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

## Question 12

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
line = "What will have so will"
L = line.split('a')
for i in L:
    print(i, end=' ')
```

- ☒ a. ['What', 'will', 'have', 'so', 'will'] ✖
- ☐ b. ['Wh', 't will h', 've so will']
- ☐ c. What will have so will
- ☐ d. Wh t will h ve so will

Your answer is incorrect.

The correct answer is:

Wh t will h ve so will

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. vijay ✓
- ☐ b. 01234
- ☐ c. No output
- ☐ d. None of the above

Your answer is correct.

The correct answer is:

vijay

Question **14**

Correct

Mark 1.00 out of 1.00

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

- ☐ a. 3
- ☐ b. 7
- ☒ c. 5 ✓
- ☐ d. 6

Your answer is correct.

The correct answer is:

5



Question **15**

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 does not change the string str1. So, output will be the original str1.

The correct answer is: poWer

[◀ Strings](#)

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Started on	Thursday, 30 May 2024, 1:42 PM
State	Finished
Completed on	Saturday, 1 June 2024, 1:42 PM
Time taken	2 days
Marks	7.00/10.00
Grade	70.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

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

Sample Test Cases

Test Case 1

Input

7  
23  
45  
23  
56  
45  
23  
40

Output

23 occurs 3 times  
45 occurs 2 times  
56 occurs 1 times  
40 occurs 1 times

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 a=[]
3 u=[]
4 c=0
5 for i in range(n):
6     t=int(input())
7     a.append(t)
8 for i in a:
9     if i not in u:
10        u.append(i)
11 for i in u:
12     print(i,"occurs",a.count(i),"times")
```

	Input	Expected	Got	
✓	7 23 45 23 56 45 23 40	23 occurs 3 times 45 occurs 2 times 56 occurs 1 times 40 occurs 1 times	23 occurs 3 times 45 occurs 2 times 56 occurs 1 times 40 occurs 1 times	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

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

Input:

n : Number of elements

List1: [List](#) of values

Output

Print "True" if [list](#) is strictly increasing or decreasing else print "False"

Sample Test Case

Input

7  
1  
2  
3  
0  
4  
5  
6

Output

True

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 a=[]
3 for i in range(n):
4     t=int(input())
5     a.append(t)
6 b=a.sort()
7 if b==a:
8     print("False")
9 else:
10    print("True")
11
```

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

	Input	Expected	Got	
✓	4 2 1 0 -1	True	True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

## Question 3

Correct

Mark 1.00 out of 1.00

Output is a merged array without duplicates.

**Input Format**

N1 - no of elements in array 1

Array elements for array 1

N2 - no of elements in array 2

Array elements for array2

**Output Format**

Display the merged array

**Sample Input 1**

5

1

2

3

6

9

4

2

4

5

10

**Sample Output 1**

1 2 3 4 5 6 9 10

**Answer:** (penalty regime: 0 %)

```
1 a=[]
2 n1=int(input())
3 for i in range(n1):
4     t=int(input())
5     if t not in a:
6         a.append(t)
7 n2=int(input())
8 for i in range(n2):
9     temp=int(input())
10    if temp not in a:
11        a.append(temp)
12 for i in sorted(a):
13    print(i,end=" ")
```

	Input	Expected	Got	
✓	5 1 2 3 6 9 4 2 4 5 10	1 2 3 4 5 6 9 10	1 2 3 4 5 6 9 10	✓
✓	7 4 7 8 10 12 30 35 9 1 3 4 5 7 8 11 13 22	1 3 4 5 7 8 10 11 12 13 22 30 35	1 3 4 5 7 8 10 11 12 13 22 30 35	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

## Question 4

Correct

Mark 1.00 out of 1.00

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

## Sample Test Cases

## Test Case 1

## Input

1  
3  
4  
5  
6  
7  
8  
9  
10  
11  
2

## Output

ITEM to be inserted:2  
After insertion array is:

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11

## Test Case 2

## Input

11  
22  
33  
55  
66  
77  
88  
99  
110  
120  
44

## Output

ITEM to be inserted:44  
After insertion array is:

11  
22  
33  
44  
55  
66  
77  
88  
99  
110  
120

**Answer:** (penalty regime: 0 %)



```
1 ^
2 2 for i in range(11):
3     t=int(input())
4     a.append(t)
5 b=sorted(a)
6 print("ITEM to be inserted:",a[10],sep="")
7 print("After insertion array is:")
8 8 for i in range (11):
9     print(b[i])
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

## Question 5

Not answered

Mark 0.00 out of 1.00

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

Example

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

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

Constraints

- $3 \leq n \leq 10^5$
- $1 \leq \text{arr}[i] \leq 2 \times 10^4$ , where  $0 \leq i < n$
- It is guaranteed that a solution always exists.

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

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

Sample Case 0

Sample Input 0

```
4
1
2
3
3
```

Sample Output 0

```
2
```

Explanation 0

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

Sample Case 1

Sample Input 1

```
3
1
2
1
```

Sample Output 1

```
1
```

Explanation 1

- The first and last elements are equal to 1.
- Using zero based indexing, `arr[1]=2` is the pivot between the two subarrays.
- The index of the pivot is 1.

**For example:**

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

Answer: (penalty regime: 0 %)

1

Question **6**  
Not answered  
Mark 0.00 out of 1.00

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

Input Format

- 1. First line is number of test cases T. Following T lines contain:
- 2. N, followed by N integers of the array
- 3. The non-negative integer k

Output format

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

Example

Input

1  
3  
1  
3  
5  
4

Output:

1

Input

1  
3  
1  
3  
5  
99

Output

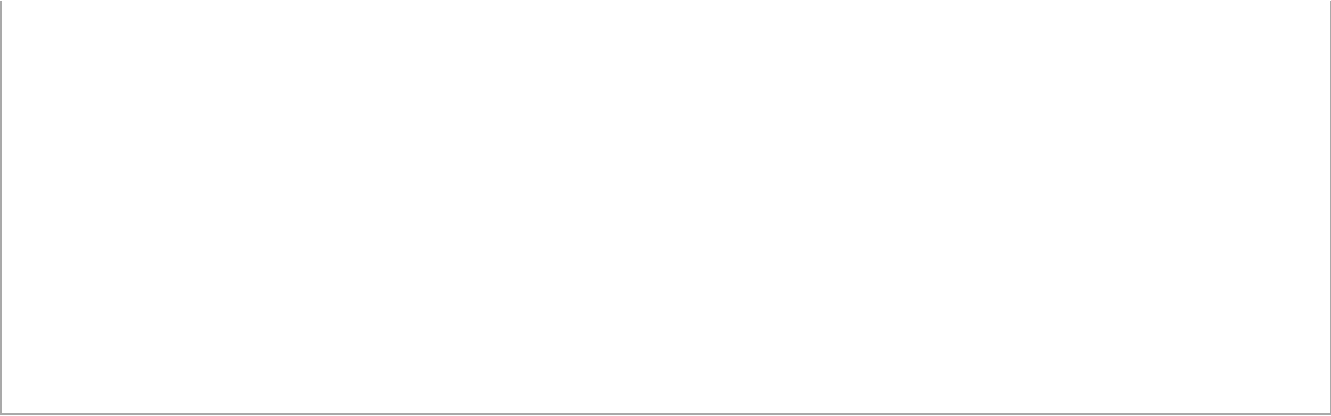
0

For example:

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

Answer: (penalty regime: 0 %)

1



//

Question **7**

Not answered

Mark 0.00 out of 1.00

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

Input:

m : row size

n: column size

list1 and [list](#) 2 : Two lists

Output

Zippered [List](#) : [List](#) which combined both list1 and list2

Sample test case

Sample input

2

2

1

3

5

7

2

4

6

8

Sample Output

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

**Answer:** (penalty regime: 0 %)

1 ||

Question 8

Correct

Mark 1.00 out of 1.00

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

Input Format:

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

Second line take n Integers which is inputs of array.

Output Format:

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

Example Input:

5  
1  
2  
2  
3  
4

Output:

1 2 3 4

Example Input:

6  
1  
1  
2  
2  
3  
3

Output:

1 2 3

For example:

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

Answer: (penalty regime: 0 %)

```
1 a=[]
2 n=int(input())
3 for i in range(n):
4     t=int(input())
5     if t not in a:
6         a.append(t)
```

```
7 | for i in a:
8 |     print(i,end=" ")
```

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

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

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

5  
6  
5  
7

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

5 is present at location 1  
5 is present at location 3  
5 is present 2 times in the array.

## Sample Test Cases

## Test Case 1

## Input

4  
5  
6  
5  
7  
5

## Output

5 is present at location 1.  
5 is present at location 3.  
5 is present 2 times in the array.

## Test Case 2

## Input

5  
67  
80  
45  
97  
100  
50

## Output

50 is not present in the array.

**Answer:** (penalty regime: 0 %)

```
1 a=[]
2 n=int(input())
3 for i in range(n):
4     t=int(input())
5     a.append(t)
6 x=int(input())
7 for i in range(len(a)):
8     if a[i] is x:
9         print(x,f"is present at location {i+1}.")
10 if x not in a:
11     print(x,"is not present in the array.")
12 else:
13     print(x,"is present",a.count(x),"times in the array.")
14
```

	Input	Expected	Got	
✓	4 5 6 5 7 5	5 is present at location 1. 5 is present at location 3. 5 is present 2 times in the array.	5 is present at location 1. 5 is present at location 3. 5 is present 2 times in the array.	✓
✓	5 67 80 45 97 100 50	50 is not present in the array.	50 is not present in the array.	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **10**

Correct

Mark 1.00 out of 1.00

Determine the factors of a number (i.e., all positive integer values that evenly divide into a number) and then return the  $p^{\text{th}}$  element of the [list](#), sorted ascending. If there is no  $p^{\text{th}}$  element, return 0.

**Example**

$n = 20$

$p = 3$

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

**Constraints**

$1 \leq n \leq 10^{15}$

$1 \leq p \leq 10^9$

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

**Sample Case 0**

**Sample Input 0**

10  
3

**Sample Output 0**

5

**Explanation 0**

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

**Sample Case 1**

**Sample Input 1**

10  
5

**Sample Output 1**

0

**Explanation 1**

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

**Sample Case 2**

**Sample Input 2**

1  
1

**Sample Output 2**

1

**Explanation 2**

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

For example:

Input	Result
10 3	5
10 5	0
1 1	1

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 p=int(input())
3 a=[]
4 for i in range(1,n+1):
5     if n%i==0:
6         a.append(i)
7 if p>len(a):
8     print("0")
9 else:
10    print(a[p-1])
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ Week6\_MCQ

Jump to...

Tuples ▶

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

Started on	Thursday, 6 June 2024, 1:02 PM
State	Finished
Completed on	Thursday, 6 June 2024, 2:18 PM
Time taken	1 hour 16 mins
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

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, "ACGAATTCG" is a **DNA sequence**.

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

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

Example 1:

**Input:** `s = "AAAAACCCCCAAAAACCCCCAAAAAGGGTTT"`  
**Output:** `["AAAAACCCCC", "CCCCCAAAA"]`

Example 2:

**Input:** `s = "AAAAAAAAAAAA"`  
**Output:** `["AAAAAAAAAA"]`

For example:

Input	Result
AAAAACCCCCAAAAACCCCCAAAAAGGGTTT	AAAAACCCCC CCCCCAAAA

**Answer:** (penalty regime: 0 %)

```
1 s=input()
2 check=set()
3 repeat=set()
4 for i in range(len(s)-9):
5     sliced=s[i:i+10]
6     tpl=tuple(sliced)
7     if tpl in check:
8         repeat.add(tpl)
9     else:
10        check.add(tpl)
11 for i in repeat:
12     print("".join(i))
```

	Input	Expected	Got	
✓	AAAAACCCCCAAAAACCCCCAAAAAGGGTTT	AAAAACCCCC CCCCCAAAA	AAAAACCCCC CCCCCAAAA	✓
✓	AAAAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	✓

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".

~ !	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	( 9	) 0	- _	= +	← Backspace	
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	 \
Caps Lock ⬆	A	S	D	F	G	H	J	K	L	:	" '	Enter ↵	
Shift ⬆	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ⬆		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

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 afd	adsfd afd

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 a=[]
3 for i in range(n):
4     t=input()
5     a.append(t)
6 row1=set("qwertyuiop")
7 row2=set("asdfghjkl")
8 row3=set("zxcvbnm")
9 flag=0
10 for j in a:
11     lower=set(j.lower())
12     if lower <= row1 or lower <= row2 or lower <= row3:
13         print(i)
```



```
14         flag=1
15 if flag==0:
16     print("No words")
17
```

	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 %)

```
1 a=set(input())
2 b=list(input())
3 count=0
4 for i in a:
5     if i in b:
6         count=count+1
7 print(count)
```

	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

Write a program to eliminate the common elements in the given 2 arrays and print only the non-repeating elements and the total number of such non-repeating elements.

Input Format:

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

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

[Sample](#) Input:

```
5 4
1 2 8 6 5
2 6 8 10
```

[Sample](#) Output:

```
1 5 10
3
```

[Sample](#) Input:

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

[Sample](#) Output:

```
NO SUCH ELEMENTS
```

For example:

Input	Result
5 4 1 2 8 6 5 2 6 8 10	1 5 10 3
5 5 1 2 3 4 5 1 2 3 4 5	NO SUCH ELEMENTS

Answer: (penalty regime: 0 %)

```
1 a=input()
2 b=input()
3 c=input()
4 b=b.split()
5 c=c.split()
6 s=[]
7 d=b+c
8 flag=0
9 for i in d:
10     if i not in b:
11         s.append(i)
12         flag=1
13     elif i not in c:
14         s.append(i)
15         flag=1
16 if flag==0:
17     print("NO SUCH ELEMENTS")
18 else:
19     for i in s:
20         print(i,end=" ")
21     print()
22     print(len(s))
```

	Input	Expected	Got	
✓	5 4 1 2 8 6 5 2 6 8 10	1 5 10 3	1 5 10 3	✓
✓	3 3 10 10 10 10 11 12	11 12 2	11 12 2	✓
✓	5 5 1 2 3 4 5 1 2 3 4 5	NO SUCH ELEMENTS	NO SUCH ELEMENTS	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

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

Examples:

Input: str = "01010101010"

Output: Yes

Input: str = "REC101"

Output: No

For example:

Input	Result
01010101010	Yes
010101 10101	No

Answer: (penalty regime: 0 %)

```
1 n=input()
2 flag=0
3 for i in n:
4     if i=="0" or i=="1":
5         continue
6     else:
7         flag=1
8 if flag==0:
9     print("Yes")
10 else:
11     print("No")
12
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ Week7\_MCQ

Jump to...

Dictionary ▶

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

Started on	Wednesday, 19 June 2024, 6:11 PM
State	Finished
Completed on	Wednesday, 19 June 2024, 8:25 PM
Time taken	2 hours 14 mins
Marks	2.00/5.00
Grade	40.00 out of 100.00

Question 1

Incorrect

Mark 0.00 out of 1.00

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

Points Letters

- 1 A, E, I, L, N, O, R, S, T and U
- 2 D and G
- 3 B, C, M and P
- 4 F, H, V, W and Y
- 5 K
- 8 J and X
- 10 Q and Z

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

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

[Sample](#) Input

REC

[Sample](#) Output

REC is worth 5 points.

For example:

Input	Result
REC	REC is worth 5 points.

Answer: (penalty regime: 0 %)

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

Syntax Error(s)

Sorry: IndentationError: unexpected indent (\_\_tester\_\_.python3, line 8)

Incorrect

Marks for this submission: 0.00/1.00.



Question 2

Correct

Mark 1.00 out of 1.00

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

**Input :** test\_dict = {'Gfg' : [6, 7, 4], 'best' : [7, 6, 5]}

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

**Explanation :** Sorted by sum, and replaced.

**Input :** test\_dict = {'Gfg' : [8,8], 'best' : [5,5]}

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

**Explanation :** Sorted by sum, and replaced.

Sample Input:

2

Gfg 6 7 4

Best 7 6 5

Sample Output

Gfg 17

Best 18

For example:

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

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 test_dict={}
3 for _ in range(n):
4     key, *values=input().split()
5     test_dict[key]=list(map(int,values))
6 sorted_dict={key:sum(values)for key,values in sorted(test_dict.items(),key=lambda item:sum(item[1]))}
7 for key,value in sorted_dict.items():
8     print(key,value)
```

	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.

Question **3**

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 Johnny get maximum votes. Since John is alphabetically smaller, we print it. Use [dictionary](#) to solve the above problem

**Sample Input:**

10  
John  
John  
Johnny  
Jamie  
Jamie  
Johnny  
Jack  
Johnny  
Johnny  
Jackie

**Sample Output:**

Johnny

**Answer:** (penalty regime: 0 %)

```
1 n=int(input())
2 a=[]
3 for i in range(n):
4     t=input()
5     a.append(t)
6 b=set(a)
7 b=list(a)
8 b=sorted(b)
9 s={}
10 for i in b:
```

```
10 for i in a:
11     name=i
12     value=a.count(i)
13     result=dict([(name,value)])
14     s.update(result)
15 say=max(s,key=s.get)
16 print(say)
```

	Input	Expected	Got	
✓	10 John John Johnny Jamie Jamie Johnny Jack Johnny Johnny 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 4

Incorrect

Mark 0.00 out of 1.00

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

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

Note:

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

Sample input:

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

Sample Output:

Ram  
James Ram  
Lalith  
Lalith

For example:

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

Answer: (penalty regime: 0 %)

```
1 def compute_statistics(student_dict):
2     average_scores = {name: sum(marks) / len(marks) for name, marks in student_dict.items()}
3     max_avg_score = max(average_scores.values())
4     min_avg_score = min(average_scores.values())
5
6     highest_avg_students = [name for name, avg_score in average_scores.items() if avg_score == max_avg_score]
7     highest_assignment_students = [name for name, marks in student_dict.items() if marks[1] == max(student_dict.values()[1])]
8     lowest_lab_students = [name for name, marks in student_dict.items() if marks[2] == min(student_dict.values()[2])]
9     lowest_avg_students = [name for name, avg_score in average_scores.items() if avg_score == min_avg_score]
10
11     return highest_avg_students, highest_assignment_students, lowest_lab_students, lowest_avg_students
12
13
14
15
16
17
```



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

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

Incorrect

Marks for this submission: 0.00/1.00.

Question **5**

Not answered

Mark 0.00 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 %)

1

[◀ Week8\\_MCQ](#)

Jump to...

[Functions ▶](#)

[Dashboard](#) / [My courses](#) / [PSPP/PUP](#) / [Experiments based on Strings and its operations.](#) / [Week5\\_MCQ](#)

**Started on** Thursday, 23 May 2024, 6:56 AM

**State** Finished

**Completed on** Thursday, 23 May 2024, 7:11 AM

**Time taken** 14 mins 19 secs

**Grade** 5.00 out of 15.00 (33.33%)

Question 1

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 2

Incorrect

Mark 0.00 out of 1.00

What is the output of the following?

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

- ☒ a. 0 1 2 ✖
- ☐ b. 0 1 2 3 0
- ☐ c. 0 1 2 0
- ☐ d. Error

Your answer is incorrect.

The correct answer is:

0 1 2 0



## Question 3

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
my_string = 'arvijayakumar'
for i in range(my_string):
    print(i)
```

- ☒ a. arvjayakumar ✖
- ☐ b. None
- ☐ c. Error
- ☐ d. 0 1 2 3 ... 12
- 1.

Your answer is incorrect.

The correct answer is:

Error

## Question 4

Incorrect

Mark 0.00 out of 1.00

What will be the output of below Python code?

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

Answer: formation ✖

The correct answer is: format

## Question 5

Incorrect

Mark 0.00 out of 1.00

What is the output of the following Code?

```
str1="6/4"
print("str1")
```

Answer: 6/4 ✖

The correct answer is: str1

## Question 6

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

```
print('Ab!2'.swapcase())
```

- ☐ a. aB1@
- ☒ b. aB!2 ✓
- ☐ c. ab12
- ☐ d. AB!@

Your answer is correct.

The correct answer is:

aB!2

## Question 7

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

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

- ☐ a. 'r'
- ☐ b. None of the above
- ☒ c. ramukayajiv ✗
- ☐ d. vijayakuma

Your answer is incorrect.

The correct answer is:

'r'

## Question 8

Incorrect

Mark 0.00 out of 1.00

What arithmetic [operators](#) cannot be used with [strings](#) in Python?

- ☐ a. All of the mentioned
- ☐ b. -
- ☐ c. +
- ☒ d. \* ✖

Your answer is incorrect.

The correct answer is:

-

## Question 9

Incorrect

Mark 0.00 out of 1.00

Python considered the character enclosed in triple quotes as String.

Select one:

- ☐ True
- ☒ False ✖

The correct answer is 'True'.

## Question 10

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
print('ab cd ef'.title())
```

- ☐ a. None of the mentioned
- ☒ b. Ab cd ef ✖
- ☐ c. Ab Cd Ef
- ☐ d. Ab cd eF

Your answer is incorrect.

The correct answer is:

Ab Cd Ef

## Question 11

Incorrect

Mark 0.00 out of 1.00

Which of the following is False?

- ☐ a. capitalize() function in string is used to return a string by converting the whole given string into uppercase.
- ☐ b. lower() function in string is used to return a string by converting the whole given string into lowercase.
- ☒ c. None of the mentioned ✖
- ☐ d. String is immutable.

Your answer is incorrect.

The correct answer is:

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

## Question 12

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
line = "What will have so will"
L = line.split('a')
for i in L:
    print(i, end=' ')
```

- ☒ a. ['What', 'will', 'have', 'so', 'will'] ✖
- ☐ b. ['Wh', 't will h', 've so will']
- ☐ c. What will have so will
- ☐ d. Wh t will h ve so will

Your answer is incorrect.

The correct answer is:

Wh t will h ve so will

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. vijay ✓
- ☐ b. 01234
- ☐ c. No output
- ☐ d. None of the above

Your answer is correct.

The correct answer is:

vijay

Question **14**

Correct

Mark 1.00 out of 1.00

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

- ☐ a. 3
- ☐ b. 7
- ☒ c. 5 ✓
- ☐ d. 6

Your answer is correct.

The correct answer is:

5

Question **15**

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 does not change the string str1. So, output will be the original str1.

The correct answer is: poWer

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