Started on	Thursday, 14 March 2024, 1:41 PM
State	Finished
Completed on	Thursday, 14 March 2024, 1:51 PM
Time taken	10 mins 29 secs
Grade	**10.00** out of 10.00 (**100**%)

Question **1**

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 **2**

Correct

Mark 1.00 out of 1.00

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

a. printf()

b. print() ✓

c. val()

d. scanf()

Your answer is correct.

The correct answer is:
print()

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 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 **5**

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. class str

b. 'str'

c. str

d. <class 'str'> ✓

Your answer is correct.

The correct answer is:
<class 'str'>

Question **6**

Correct

Mark 1.00 out of 1.00

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

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

Your answer is correct.

The correct answer is:
.py

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. float ✓
- b. str
- c. int
- d. obj

Your answer is correct.

The correct answer is:
float

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. No output
- c. 3 1
  3 1
- 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

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

Question **10**

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. Key
- c. Indentation ✓
- d. Parenthesis

Your answer is correct.

The correct answer is:
Indentation

◄ Basics of Python

Jump to...

Week1_Coding ►

For example:

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

Answer: (penalty regime: 0 %)

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

```

	Input	Expected	Got	
✓	10 10.9	10,<class 'int'> 10.9,<class 'float'>	10,<class 'int'> 10.9,<class 'float'>	✓
✓	12 12.5	12,<class 'int'> 12.5,<class 'float'>	12,<class 'int'> 12.5,<class 'float'>	✓
✓	89 7.56	89,<class 'int'> 7.6,<class 'float'>	89,<class 'int'> 7.6,<class 'float'>	✓
✓	55000 56.2	55000,<class 'int'> 56.2,<class 'float'>	55000,<class 'int'> 56.2,<class 'float'>	✓

Input	Result
10000	16000

Answer: (penalty regime: 0 %)

```
a=int(input())
b=a*0.4
c=a*0.2
d=a+b+c
print(d)
```

	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.

For example:

Input	Result
14.00	3.742

Answer: (penalty regime: 0 %)

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

```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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 %)

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

	Input	Expected	Got	
✓	10000 250 15000	46.34 is the gain percent.	46.34 is the gain percent.	✓

For example:

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

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
c=a*0.10
d=b*0.25
e=c+d
print("Your total refund will be $%.2f."%e)
```

	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.	✓

Sample Input:

450

Sample Output:

weekdays 10.38

weekend 0.38

For example:

Input	Result
450	weekdays 10.38 weekend 0.38

Answer: (penalty regime: 0 %)

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

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

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

a. operands, an expression ✓

b. terms, a group

c. operators, a statement

d. operands, an equation

Your answer is correct.

The correct answer is:
operands, an expression

d. **_var**

Your answer is correct.

The correct answer is:

5var

c.
- True True False True

d.
- False True False True

Your answer is correct.

The correct answer is:

- False True True True

b. ✓

<class 'list'>

c. **<class 'complex'>**

d. **<class 'int'>**

Your answer is correct.

The correct answer is:

<class 'list'>

c. **x := 35**

d. **x = 35** ✓

Your answer is correct.

The correct answer is:

x = 35

Question **6**

Correct

Mark 1.00 out of 1.00

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

a. 16

b. 256

c. 65536 ✓

d. 32768

Your answer is correct.

The correct answer is:
65536

a. **True**
False
False

b. **False**
False
True

c. **True**
True
True

d. **True** ✓
False
True

Your answer is correct.

The correct answer is:
True
False
True

b. 1

c. 10

d. 4 ✓

Your answer is correct.

The correct answer is:
4

Question **9**

Correct

Mark 1.00 out of 1.00

What is the output of the following code

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

a. False ✓

b. Error

c. 5==3

d. True

Your answer is correct.

The correct answer is:
False

Your answer is correct.

The correct answer is:
79

Question **11**

Correct

Mark 1.00 out of 1.00

Which among the following list of operators has the highest precedence?

```
+, -, **, %, /, <<, >>, |
```

a. %

b. ** ✓

c. |

d. <<, >>

Your answer is correct.

The correct answer is:
**

11010100

Question **13**

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. 5.0

d. 5 ✕

Your answer is incorrect.

The correct answer is:
Error

Your answer is correct.

The correct answer is:
24.0

Question **15**

Correct

Mark 1.00 out of 1.00

What is the output of the following expression?

```
z=2
z**=3
print(z)
```

- a. 3
- b. 0
- c. 8 ✓
- d. Error

Your answer is correct.

The correct answer is:
8

◄ Operators

Jump to...

Week2_Coding ►

32

43

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)
```

Answer: (penalty regime: 0 %)

```
a=int(input())
b=a*0.04
c=a+b
print("Balance as of end of Year 1: $%.2f."%c )
d=c+(c*0.04)
print("Balance as of end of Year 2: $%.2f."%d)
e=d+(d*0.04)
print("Balance as of end of Year 3: $%.2f."%e)
```

	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.

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 %)

```
a=int(input())
print(a!=0 and a<100 and a>0)
```

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

Passed all tests! ✓

```
0
Output 1:
C
```

```
Input 2:
1

Output 1:
D
```

For example:

Input	Result
0	C

Answer: (penalty regime: 0 %)

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

197	7
-197	7

Answer: (penalty regime: 0 %)

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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 %)

```
a=float(input())
b=a*0.05
c=a*0.18
d=a+b+c
print("The tax is %.2f"%b, "and the tip is %.2f,"%c, "making the total %.2f"%d)
```

	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.

5

25

12

10

9

OUTPUT

True False True False

For example:

Input	Result
5 25 23 20 10	True False True True

Answer: (penalty regime: 0 %)

```
n=int(input())
p1=int(input())
p2=int(input())
p3=int(input())
p4=int(input())
print(p1%n==0, end=' ')
print(p2%n==0, end=' ')
print(p3%n==0, end=' ')
print(p4%n==0, end=' ')
```

	32			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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 %)

```
a=int(input())
b=int(input())
print(a>=18 and b>40)
```

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
c=a*75
d=b*112
e=c+d
print("The total weight of all these widgets and gizmos is",e,"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.

For example:

Input	Result
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.

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. No output

b. REC
OPEN-ELECTIVE

c. REC ✕

d. OPEN-ELECTIVE

Your answer is incorrect.

The correct answer is:
No output

Your answer is correct.

The correct answer is:
35

Question **3**

Correct

Mark 1.00 out of 1.00

Python supports _____ types of control structures.

a. 4

b. 2

c. 3 ✓

d. 1

Your answer is correct.

The correct answer is:
3

Question **5**

Correct

Mark 1.00 out of 1.00

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

a. print(“Hurry Up!!”) ✓

b. print(Hurry Up!!!)

c. printf(“Hurry Up!!”)

d. print_sentence(Hurry Up!!!)

Your answer is correct.

The correct answer is:
print(“Hurry Up!!”)

b. True ✓

c. False

Your answer is correct.

The correct answer is:
True

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

d. IIT Punjab

Your answer is correct.

The correct answer is:
IIT IIT Ropar

Question **9**

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

b. Know Program ✓

c. Compiled Successfully, No Output.

d. Hello

Your answer is correct.

The correct answer is:
Know Program

Question **11**

Correct

Mark 1.00 out of 1.00

What is the output of the following code snippet?

```
a = "Hi"
b = "Arjuna"
c = "Bhimaa"
print("Hi", a, b, c)
```

a. Hi Arjuna Bhimaa Hi

b. Hi Arjuna Hi Bhimaa

c. Hi Hi Arjuna Bhimaa ✓

d. Hi Arjuna Bhimaa

Your answer is correct.

The correct answer is:
Hi Hi Arjuna Bhimaa

Your answer is correct.

The correct answer is:
0 is false

Question **13**

Correct

Mark 1.00 out of 1.00

____ is an empty statement in Python.

a. Jump

b. Empty

c. pass ✓

d. None

Your answer is correct.

The correct answer is:
pass

a. REC

REC

b. REC ✓

c. No output

REC

d. false

REC

Your answer is correct.

The correct answer is:
REC

c. if x is lesser then 0,x will be 0 after this code executes

d. x will always equal 0 after this code executes for any value of x

Your answer is correct.

The correct answer is:
if x is greater than 2, x will equal 0 after this code executes

◄ Selection control structures

Jump to...

Week3_coding ►

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 %)

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

```

That's a equilateral triangle

Sample Input 2

40

40

80

Sample Output 2

That's a isosceles triangle

Sample Input 3

50

60

70

Sample Output 3

That's a scalene triangle

For example:

Input	Result
60 60 60	That's a equilateral triangle
40 40 80	That's a isosceles triangle

Answer: (penalty regime: 0 %)

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

yes

Sample Test Cases

Test Case 1

Input

3

5

4

Output

yes

Test Case 2

Input

5

8

2

Output

no

Answer: (penalty regime: 0 %)

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

March has 31 days in it.

Sample Input 3

April

Sample Output 3

April has 30 days in it.

For example:

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

Answer: (penalty regime: 0 %)

```
month=input()
if month=='January' or month=='March' or month=='May' or month=='July' or month=='August' or month=='Octo
    print(month,"has 31 days in it.")
elif month=='February':
    print(month,"has 28 or 29 days in it.")
else:
    print(month,"has 30 days in it.")

```

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 %)

```
a=float(input())
if a<=199:
    b=a*1.20
    if b<100:
        b=100
        print("%.2f"%b)
    else:
        print("%.2f"%b)
elif a>=200 and a<400:
    b=a*1.50
elif a>=400 and a<600:
    b=a*1.80
else:
    b=a*2.00
if b>400:
    b=b+(b*0.15)
    print("%.2f"%b)

```

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 %)

```
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:
    print(a,"is the year of the Rat.")
elif a>=0 and a%12==5:
    print(a,"is the year of the Ox.")
elif a>=0 and a%12==6:
    print(a,"is the year of the Tiger.")
```

Input consists of 2 integers.

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

Output Format:

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

Sample Input and Output:

Input

8

3

Output

OUT

For example:

Input	Result
8 3	OUT

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
if b>=a//2:
    print("IN")
```

	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.

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 %)

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

	Input	Expected	Got	
✓	1900	1900 is not a leap year.	1900 is not a leap year.	✓
✓	2000	2000 is a leap year.	2000 is a leap year.	✓
✓	2100	2100 is not a leap year.	2100 is not a leap year.	✓
✗	2020	2020 is a leap year.	2020 is not a leap year.	✗

197	9
5	-1

Answer: (penalty regime: 0 %)

```
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

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 %)

```
maths=int(input())
physics=int(input())
chemistry=int(input())
if maths>=65 or physics>=55 and chemistry>=50:
    print("The candidate is eligible")
```

✓	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.

◄ Week3_mcq

Jump to...

Iteration control structures ►

a. for

b. switch

c. do-while

d. while

Question **2**

Complete

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

a. 2 4 6 8

b. 2 3 4 5 6 7 8

c. 2 7

d. 2 8

0

b. **0**
0
1
1
0

c. **0**
0
1
2
0

d. **0**
1
1
1
0

Question **4**

Complete

Syntax of range()

a. (start, step, stop)

b. (stop, step, start)

c. (step, stop, start)

d. (start, stop, step)

d. 1 2

Question **6**

Complete

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

What is the output of the following?
```

a. **No output**

b. **False**

c. **True**

d. **Syntax Error**

Question **7**

Complete

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

Answer: 101 times(from 0 to 101)

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

Answer: 101 times (from 0 to 101)

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. 0
   1
   2
   3
   Finally Finished!

b. Finally Finished!

c. 0
   1
   2
   3

d. 0
   1
   2

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

What is the output of the following?

a. **False**

b. **No output**

c. **Syntax Error**

d. **True**

Question **13**

Complete

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

a.
```
for[sequence] in [item]:
     loop body
```

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

c.
```
for [item] in [item]:
     loop body
```

d.
```
for[sequence] in [sequence]:
     loop body
```

a. Runtime Error

b. Prints 0,1,2

c. Compilation Error

d. Prints nothing

◄ Iteration control structures

Jump to...

Week4_Coding ►

For example:

Input	Result
292	1
1015	2
108	3
22	0

Answer: (penalty regime: 0 %)

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

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

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())
i=1
fact=1
while i<=n:
    fact=fact*i
    i=i+1
print(fact)
```

	Input	Expected	Got	
✓	5	120	120	✓
✓	4	24	24	✓

• 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(b)
```

	Input	Expected	Got	
✓	1	0	0	✓

Example Input:

13

Output:

No

Answer: (penalty regime: 0 %)

```
n=int(input())
flag=0
for i in range(1,10,1):
    for j in range(1,10,1):
        if i*j==n:
            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.

1015	3

Answer: (penalty regime: 0 %)

```
a=int(input())
b=set(str(a))
c=0
for i in b:
    c=c+1
print(c)
```

	Input	Expected	Got	
✓	292	2	2	✓
✓	1015	3	3	✓
✓	123	3	3	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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 %)

```
n=int(input())
temp=n
a=0
while n!=0:
    n=n//10
    a=a+1
n=temp
sum=0
while n!=0:
    rem=n%10
    sum=sum+(rem**a)
    n=n//10
    a=a-1
if sum==temp:
    print("Yes")
else:
    print("No")
```

10	1

Answer: (penalty regime: 0 %)

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

```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Answer: (penalty regime: 0 %)

```
n=int(input())
for i in range (1,n+1,1):
    x=i*i
    if x>=n:
        print(x)
        break

```

	Input	Expected	Got	
✓	10	16	16	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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! ✓

Input

6

Output

123456

Answer: (penalty regime: 0 %)

```
n=int(input())
a=1
b=0
for i in range(1,n+1,1):
    b=a+b
    a=(a*10)+1
print(b)
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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 **2**

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

Correct

Mark 1.00 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 correct.

The correct answer is:
* abcde *

The correct answer is: ApplicAtion

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'.

c. Arvijayakumar

d. A

Your answer is correct.

The correct answer is:
Error

Question **8**

Correct

Mark 1.00 out of 1.00

What is the index value of ‘i’ in string “Learning”

a. 6

b. 7

c. 3

d. 5 ✓

Your answer is correct.

The correct answer is:
5

Your answer is correct.

The correct answer is:
-1

Question **10**

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

```
my_string = 'vijay'
for i in range(len(my_string)):
    print (my_string)
    my_string = 'a'
```

a. vaaaaaaaaaaa

b. vijay a a a a ✓ String is modified only after 'vijay' has been printed once.

c. None

d. Error

Your answer is correct.

The correct answer is:
vijay a a a a

-

Question **12**

Correct

Mark 1.00 out of 1.00

What will be the output of the following code?

```
a = 'ab'
b = 4
print(a*b)
```

Answer: abababab ✓

The correct answer is: abababab

Question **13**

Correct

Mark 1.00 out of 1.00

What is the output of the following Code?

```
print(ord('C'))
```

Answer: 67 ✓

The correct answer is: 67

d. [Wh', 't will h', 've so will'] ✗

Your answer is incorrect.

The correct answer is:
Wh t will h ve so will

Question **15**

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. i i i i i i . . . ✗

b. None

c. arvjayakumar

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

Your answer is incorrect.

The correct answer is:
None

◄ Strings

Jump to...

Week5_Coding ►

Input	Result
Wipro Technologies Bangalore	TECHNOLOGIES
Hello World	WORLD
Hello	LESS

Answer: (penalty regime: 0 %)

```
s=input()
s1=s.upper()
s2=s1.split()
if len(s2)>=2:
    print(s2[1])
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.

Answer: (penalty regime: 0 %)

```
s=input()
temp=0
x=""
for i in s:
    if i.isalpha():
        print(x*temp,end="")
        temp=0
        x=i
    else:
        temp=temp*10+int(i)
print(x*temp,end="")
```

	Input	Expected	Got	
✓	a2b4c6	aabbbbcccccc	aabbbbcccccc	✓
✓	a12b3d4	aaaaaaaaaaaabbbdddd	aaaaaaaaaaaabbbdddd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

```
s1=input()
s2=input()
print(s1 in s2)
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Input	Result
A&x#	x&A#

Answer: (penalty regime: 0 %)

```
s=input()
x=" "
for i in s:
    if i.isalpha():
        x=x+i
x=x[::-1]
y=0
for i in s:
    if i.isalpha():
        print(x[y],end="")
        y=y+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.

first

second

third

Answer: (penalty regime: 0 %)

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

	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! ✓

Example Input/Output 1:

Input:

abcbde
cdefghbb
3

Output:

bcd

Note:

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

Answer: (penalty regime: 0 %)

```
s1=input()
s2=input()
n=int(input())
a=""
for i in s1:
    if (i in s2) and (not i in a):
        a=a+i
        if len(a)>=n:
            break
print(a)


```

	Input	Expected	Got	
✓	abcbde cdefghbb 3	bcd	bcd	✓

is my mother tongue

Answer: (penalty regime: 0 %)

```
s=input()
s1=s.lower()
s2=s1.split()
for i in s2:
    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.

```
s=input()
c=0
for i in s:
    if i.isalpha():
        c=c+1
print(c)
a=0
for i in s:
    if i.isdigit():
        a=a+1
print(a)
x=c+a
y=len(s)-x
print(y)
```

	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.

xpri

Answer: (penalty regime: 0 %)

```
s1=input()
s2=input()
for i in s1:
    s3=s1.replace(s2[0],'')
    s4=s3.replace(s2[1],'')
    s5=s4.replace(s2[2],'')
print(s5)
```

	Input	Expected	Got	
✓	experience enc	xpri	xpri	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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.split('@')
s2=s1[1].split('.',1)
print(s2[1])
print(s2[0])
print(s1[0])
```

Choose a correct statement

a. List are immutable

b. List is data structure in python used to store the sequence of same types.

c. List is data structure in python used to store the sequence of various types. ✓

d. is used to represent the list

Your answer is correct.

The correct answer is:
List is data structure in python used to store the sequence of various types.

Question **2**

Correct

Mark 1.00 out of 1.00

Suppose list1 is [35, 55, 25, 11, 3], what is min(list1)?

a. 3 ✓

b. 11

c. 35

Your answer is correct.

The correct answer is:
3

The correct answer is:
List

Question **4**

Correct

Mark 1.00 out of 1.00

```
L=[1,5,9]
print(sum(L),max(L),min(L))
```

Answer: 15 9 1 ✓

The correct answer is: 15 9 1

Your answer is correct.

The correct answer is:
['A', 'B', 'C']

Question **6**

Correct

Mark 1.00 out of 1.00

Find the output?

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

a. -4

b. 3 ✓

c. AttributeError: 'list' object has no attribute 'index'

d. 4

Your answer is correct.

The correct answer is:
3

The correct answer is: [4, 3]

Question **8**

Correct

Mark 1.00 out of 1.00

What will be the output of the following Python code?

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

a. A

b. i ✓

c. Vaishali

Your answer is correct.

The correct answer is:
i

Mark 0.00 out of 1.00

Write the output of the following:

```
T=(1,2,3,4,5.5)
L = list(T)
print(L*2)
```

Answer: [1,2,3,4,5.5,1,2,3,4,5.5] ✗

The correct answer is: [1, 2, 3, 4, 5.5, 1, 2, 3, 4, 5.5]

Question **11**

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. del()

c. pop()

d. remove() ✓

Your answer is correct.

The correct answer is:
remove()

Question **13**

Correct

Mark 1.00 out of 1.00

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

- a. 4
- b. Error
- c. 5 ✓

Your answer is correct.

The correct answer is:
5

The correct answer is: [1, 2, 3, 4]

Question **15**

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. December

b. September ✓

c. July

d. [‘July’, ‘September’, ‘December’]

Your answer is correct.

The correct answer is:
September

◄ List

Jump to...

Week6_Coding ►

1

2

3

0

4

5

6

Output

True

Answer: (penalty regime: 0 %)

```
n=int(input())
a=[]
flag=0
for i in range(n):
    t=int(input())
    a.append(t)
if a==sorted(a) or a==sorted(a,reverse=True):
    flag=1
for i in range(n):
    b=a.copy()
    b.pop(i)
    if b==sorted(b) or b==sorted(b,reverse=True):
        flag=1
print(flag==1)
```

Correct

Marks for this submission: 1.00/1.00.

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

2

2
1

3

5

7
2

4

6

8

Sample Output

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

Answer: (penalty regime: 0 %)

```
a=int(input())
b=int(input())
x=[]
y=[]
A=a
for i in range(a):
    z=[]
    for j in range(b):
        t=int(input())
        z.append(t)
    if(a==A):
        x.append(z)
    else:
        a=a+r
for i in range(a):
    z=[]
    for i in range(b):
        t1=int(input())
        z.append(t1)
    if a==A:
        y.append(z)
    else:
        y=y+z
for i in range(b):
    x[i].extend(y[i])
print(list(x))
```

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 %)

```
n1=int(input())
a=[]
for i in range(n1):
    t1=int(input())
    a.append(t1)
n2=int(input())
b=[]
for i in range(n2):
    t2=int(input())
    b.append(t2)
c=[]
for i in a:
    if i not in c:
        c.append(i)
for i in b:
    if i not in c:
        c.append(i)
d=sorted(c)
for i in d:
    print(i,end=" ")
```

	30 35 9 1 3 4 5 7 8 11 13 22			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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 %)

```
n=int(input())
a=[]
for i in range(n):
```

	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.

45
23
40

Output

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

Answer: (penalty regime: 0 %)

```
n=int(input())
a=[]
for i in range(n):
    t=int(input())
    a.append(t)
u=[]
for i in a:
    if i not in u:
        u.append(i)
        print(i,"occurs",a.count(i),"times")
```

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

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

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

Sample Case 0

Sample Input 0

```
4
1
2
3
3
```

Sample Output 0

```
2
```

Explanation 0

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

Sample Case 1

Sample Input 1

```
3
1
2
1
```

Sample Output 1

```
1
```

Explanation 1

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

```
for i in range(n):
    t=int(input())
    a.append(t)
total=sum(a)
left=0
for i in range(n):
    total=total-a[i]
    if left==total:
        print(i)
        break
    left+=a[i]
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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

	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.

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

```
n=int(input())
a.append(n)
a.sort()
print("ITEM to be inserted:",n,sep="")
print("After insertion array is:")
for i in a:
    print(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	✓

1 ≤ p ≤ 10

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

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

Sample Case 0

Sample Input 0

10

3

Sample Output 0

5

Explanation 0

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

Sample Case 1

Sample Input 1

10

5

Sample Output 1

0

Explanation 1

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

Sample Case 2

Sample Input 2

1

1

Sample Output 2

1

Explanation 2

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

For example:

```
else:
    print(l1[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 ►

What is the output of the given below program?

```
t1 = (1,2,3)
t2 = (4,5,6)
x = t1+t2
print(x)
```

a. Error

b. (1,2,3,3,2,1)

c. (1,2,3,4,5,6) ✓

d. (1,2,3)(4,5,6)

Your answer is correct.

The correct answer is:
(1,2,3,4,5,6)

d. [1, 4, 8]

Your answer is correct.

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

Question **3**

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’, True, (‘cse’, ‘ece’)}

b. Error

c. {‘rec’, 1, (‘cse’, ‘ece’)}

d. {‘rec’, 1, (‘cse’, ‘ece’),True} ✕

Your answer is incorrect.

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

b. {40, 10, '10', 50, 20, 60, 30} ✓

c. SynatxError: Different types cannot be used with sets

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

Your answer is correct.

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

Question **5**

Correct

Mark 1.00 out of 1.00

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

a. True ✓

b. False

Your answer is correct.

The correct answer is:
True

Your answer is correct.

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

Question **7**

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]

Your answer is correct.

The correct answer is:
sampleSet.discard("ECE")

Question **9**

Correct

Mark 1.00 out of 1.00

What will be the output of the below Python code?

```
t1=(55,12,78,64,25)
t1.pop(12)
print(tuple1)
```

a. (12)

b. 12

c. (55,78,64,25)

d. Error ✓

Your answer is correct.

The correct answer is:
Error

Your answer is correct.

The correct answer is:
Error

Question **11**

Correct

Mark 1.00 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. Elements of set2 will get appended to set1

c. Elements of set1 will get appended to set2

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

Your answer is correct.

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

tupl1=tupl+tupl

Question **13**

Correct

Mark 1.00 out of 1.00

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

Note :

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

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

- a. (16,17,18,19) ✓
- b. (16,17,18)
- c. (25,19,18,17)
- d. Error

Your answer is correct.

The correct answer is:
(16,17,18,19)

c. <class 'tuple'>

d. <class 'int'>

Your answer is correct.

The correct answer is:
<class 'str'>

Question **15**

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

```
aTuple = (10, 20, 30, 40, 50, 60, 70, 80)
print(aTuple[2:5], aTuple[:4], aTuple[3:])
```

a. (30, 40, 50) (10, 20, 30, 40)

b. (10, 20, 30, 40) (40, 50, 60, 70, 80)

c. (30, 40, 50)(40, 50, 60, 70, 80)

d. (30, 40, 50) (10, 20, 30, 40) (40, 50, 60, 70, 80) ✓

Your answer is correct.

The correct answer is:
(30, 40, 50) (10, 20, 30, 40) (40, 50, 60, 70, 80)

◄ Set

Jump to...

Started on	Wednesday, 5 June 2024, 9:26 PM
State	Finished
Completed on	Friday, 7 June 2024, 9:26 PM
Time taken	2 days
Marks	4.00/5.00
Grade	**80.00** 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, `"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 %)

```
a=tuple(input())
b=[]
for i in range(len(a)):
    b.append(a[i])
    if i==9:
        break
c="".join(b)
d=c[::-1]
if c!=d:
    print(c)
    print(d)
else:
    print(c)
```

	Input	Expected	Got	
✓	AAAAACCCCCAAAAACCCCCCAAAAAGGGTTT	AAAAACCCCC CCCCCAAAAA	AAAAACCCCC CCCCCAAAAA	✓

	Input	Expected	Got	
✓	AAAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Incorrect

Mark 0.00 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 %)

```
s=input()
a=input()
b=input()
A=a.split()
B=b.split()
s1=set(A)
s2=set(B)
x=s1 ^ s2
flag=0
for i in x:
    print(i,end=" ")
    flag=1
if flag==0:
    print("No such elements")
print()
print(len(x))
```

	Input	Expected	Got	
✗	5 4 1 2 8 6 5 2 6 8 10	1 5 10 3	5 1 10 3	✗
✓	3 3 10 10 10 10 11 12	11 12 2	11 12 2	✓

Some hidden test cases failed, too.

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

Show differences

Incorrect

Marks for this submission: 0.00/1.00.

Question **3**

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 %)

```
x=input()
y=[]
for i in x:
    if i not in y:
        y.append(i)
    else:
        print(i)
```

	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 **4**

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 %)

```
s=input()
flag=0
for i in s:
    if i=="0" or i=="1":
        continue
    else:
        flag=1
        break
if flag==0:
    print("Yes")
else:
    print("No")
```

	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.

Question **5**

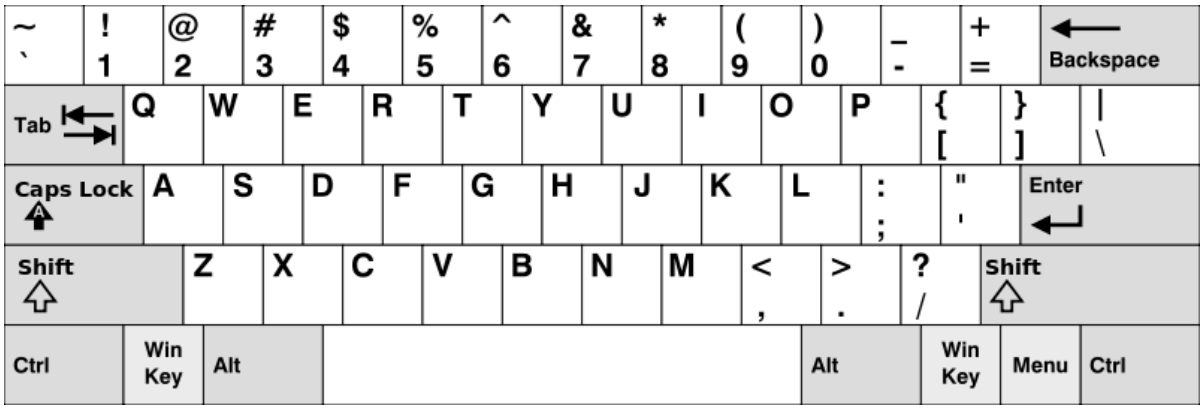
Correct

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 %)

```
n=int(input())
a=[]
b=[]
for i in range(n):
    t=input()
```

```
    a.append(t)
x=set("qwertyuiop")
y=set("asdfghjkl")
z=set("zxcvbnm")
flag=0
for j in a:
    lower=set(j.lower())
    if lower <= x or lower <= y or lower <= z:
        print(j)
        flag=1
if flag==0:
    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.

◄ Week7_MCQ

Jump to...

Dictionary ►

Keys of dictionary must be _____.

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

The correct answer is: unique

Question **2**

Correct

Mark 1.00 out of 1.00

clear() method is used to delete the dictionary.

- a. True
- b. False ✓

The correct answer is: False

Question **4**

Correct

Mark 1.00 out of 1.00

Which of the following function create a dictionary from a sequence of key-value pairs

a. convert
b. dict ✓
c. create
d. dictionary

The correct answer is: dict

Question **5**

Correct

Mark 1.00 out of 1.00

Keys in dictionary are _____.

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

The correct answer is: Immutable

Question **7**

Correct

Mark 1.00 out of 1.00

Only values (without keys) can be printed in dictionary?

a. False

b. True ✓

The correct answer is: True

a. b,c

b. c,d,e

c. a,b

d. d,e,f ✓

Your answer is correct.

The correct answer is:
d,e,f

Question **9**

Correct

Mark 1.00 out of 1.00

Dictionary is a _____ data type.

a. None of the mentioned

b. Ordered

c. Mapping ✓

d. Sequence

The correct answer is: Mapping

Question **11**

Correct

Mark 1.00 out of 1.00

Which of the following is feature of Dictionary?

a. All of the mentioned ✓

b. Dictionary is mutable.

c. Keys must be of an immutable data type.

d. Keys are unique within a dictionary.

The correct answer is: All of the mentioned

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

d. {'b': [2, 3, 4], 'a': 1} ✓

Your answer is correct.

The correct answer is:
{'b': [2, 3, 4], 'a': 1}

Question **13**

Correct

Mark 1.00 out of 1.00

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

a. True ✓

b. False

The correct answer is: True

Question **15**

Correct

Mark 1.00 out of 1.00

In Python, Dictionaries are immutable

Select one:

- True
- False ✓

The correct answer is 'False'.

◄ Dictionary

Jump to...

Week8_Coding ►

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

Sample Input:

10

John

John

Johny

Jamie

Jamie

Johny

Jack

Johny

Johny

Jackie

Sample Output:

Johny

Answer: (penalty regime: 0 %)

```
1  n=int(input().strip())
2  vote_count={}
```

	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.

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 %)

```
scrabble_points={
    '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().strip().upper()
score=0
for letter in word:
    score=score+scrabble_points.get(letter,0)
print(f"{word} is worth {score} points.")
```

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()
b=input()
A=a.split()
B=b.split()
s=[]
for i in A:
    if A not in B:
        s.append(i)
for i in B:
    if B not in A:
        s.append(i)
for i in s:
    c=s.count(i)
    if c==1:
        print(i,end=" ")
```

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 %)

```
n = int(input())
test_dict = {key: sum(map(int, values)) for key, *values in (input().split() for _ in range(n))}
sorted_dict = {key: value for key, value in sorted(test_dict.items(), key=lambda x: x[1])}
for key, value in sorted_dict.items():
    print(key, value)
```

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())
students = {}
for _ in range(n):
    name, test, assignment, lab = input().split()
    students[name] = {'test': int(test), 'assignment': int(assignment), 'lab': int(lab)}
averages = {name: sum(info.values()) / 3 for name, info in students.items()}

a = max(averages.values())
A = sorted([name for name, avg in averages.items() if avg == a])

b = max((info['assignment'] for info in students.values()))
```

✓	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.

◄ Week8_MCQ

Jump to...

Functions ►

Choose the incorrect statement.

- a. print(pow(2.3, 3.2))
- b. print(pow(2, 3, 2))
- c. print(pow(2, 3))
- d. None of the mentioned ✓

The correct answer is: None of the mentioned

Question **2**

Correct

Mark 1.00 out of 1.00

6. Which of the following is not the built-in function?

- a. input( )
- b. dictionary( ) ✓
- c. print( )
- d. tuple( )

The correct answer is: dictionary( )

Question **4**

Correct

Mark 1.00 out of 1.00

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

- a. Modular Programming ✓
- b. Step Programming
- c. More Programming
- d. Programming

The correct answer is: Modular Programming

Question **5**

Incorrect

Mark 0.00 out of 1.00

Which of the following statement is a function call?

- a. def sum
- b. function sum ✗
- c. sum
- d. call sum

The correct answer is: sum

Question **7**

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. module ✕
- b. scope
- c. part
- d. none of the mentioned

The correct answer is: scope

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

b. n*(n-1) ✗

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

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

Your answer is incorrect.

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

Question **9**

Correct

Mark 1.00 out of 1.00

Which keyword is used for defining a function?

a. Define

b. Function

c. Fun

d. def ✓

Your answer is correct.

The correct answer is:
def

function_name()

Question **11**

Correct

Mark 1.00 out of 1.00

Which of the following function headers is correct?

a. def fun(a, b = 2, c = 3) ✓

b. def fun(a = 2, b = 3, c)

c. def fun(a, b, c = 3, d)

d. def fun(a = 2, b, c = 3)

Your answer is correct.

The correct answer is:
def fun(a, b = 2, c = 3)

c. 'Hello World!'
'Hello World!'

d. Hello
Hello

Your answer is correct.

The correct answer is:
Hello World!
Hello World!

Question **13**

Correct

Mark 1.00 out of 1.00

Which keyword is used to begin the definition of a function?

a. Define
b. Def
c. def ✓
d. DEF

The correct answer is: def

Question **15**

Correct

Mark 1.00 out of 1.00

Python function always returns a value

Select one:

- True ✓
- False

The correct answer is 'True'.

◄ Functions

Jump to...

Week9_Coding ►

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):
    def is_prime(digit):
        if digit in {2,3,5,7}:
            return "True"
    s_n=str(n)
    discount=sum(int(digit) for digit in s_n if is_prime(int(digit)))
    return discount
```

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

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):
    l=[]
    odd=[]
    even=[]
    n=str(n)
    for i in n:
        l.append(int(i))
    for i in range(1,len(l)+1):
        if i%2==0:
            even.append(l[i-1])
        else:
            odd.append(l[i-1])
    odds,evens=sum(odd),sum(even)
    return evens-odds
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Yes

Explanation

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

Example input:

13

Output:

No

Explanation

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

For example:

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

Answer: (penalty regime: 0 %)

Reset answer

```
def abundant(n):
    sum=0
    for i in range(1,n):
        if n%i==0:
            sum=sum+i
    if sum>n:
        return "Yes"
    else:
        return "No"
```

Test	Result
print(automorphic(5))	Automorphic

Answer: (penalty regime: 0 %)

Reset answer

```
def automorphic(n):
    if n<0:
        return"Invalid input"
    s=n*n
    num=str(n)
    s=str(s)
    if s.endswith(num):
        return "Automorphic"
    else:
        return "Not Automorphic"
```

	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.

TRUE

Example Input:

1595

Output:

FALSE

For example:

Test	Result
`print(productDigits(1256))`	`True`
`print(productDigits(1595))`	`False`

Answer: (penalty regime: 0 %)

Reset answer

```
def productDigits(n):
    num_str=str(n)
    sum_odd=0
    product_even=1
    for i,digit in enumerate(num_str):
        digit=int(digit)
        if n%2==0:
            sum_odd+=digit
        else:
            product_even*=digit
    if sum_odd==0:
        return False
    return product_even//sum_odd==0
```

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. 40,70,80,90,120,150,200,300,400,470
- b. 200,470,80,150,40,90,300,400,70,120
- c. 80,150,200,470,40,90,300,400,70,120 ✓
- d. 40,80,90,150,200,300,400,470,70,120

Your answer is correct.

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

Question **2**

Correct

Mark 1.00 out of 1.00

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

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

Your answer is correct.

The correct answer is:
Insertion

Binary

Question **4**

Correct

Mark 1.00 out of 1.00

Very slow way of sorting is_____

a. Bubble sort

b. Quick sort

c. Heap sort

d. Insertion sort ✓

Your answer is correct.

The correct answer is:
Insertion sort

The correct answer is:
90 and 99

Question **6**

Correct

Mark 1.00 out of 1.00

Algorithm design technique used in merge sort algorithm is

a. Divide and conquer ✓

b. Dynamic programming

c. Greedy method

d. Backtracking

Your answer is correct.

The correct answer is:
Divide and conquer

The correct answer is:
Complexity

Question **8**

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. Rearranging

b. Sorting ✓

c. Searching

d. Merging

Your answer is correct.

The correct answer is: Sorting

Searching

Question **10**

Correct

Mark 1.00 out of 1.00

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

a. Selection sort

b. Heap sort

c. Quick sort

d. Merge sort ✓

Your answer is correct.

The correct answer is:
Merge sort

Your answer is correct.

The correct answer is: Bubble

Question **12**

Correct

Mark 1.00 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 correct.

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

Your answer is correct.

The correct answer is:
There must be a mechanism to delete and/or insert elements in the list

Question **14**

Correct

Mark 1.00 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. 90 and 99 ✓
- b. 90 and 100
- c. 89 and 94
- d. 94 and 99

Your answer is correct.

The correct answer is:
90 and 99

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

◄ Searching

Jump to...

Week10_Coding ►

6 3 4 8 7 1 2	1 2 3 4 7 8
5 4 5 2 3 1	1 2 3 4 5

Answer: (penalty regime: 0 %)

```
n=int(input())
array=input().split()
for i in range(n):
    array[i]=int(array[i])
for i in range(n):
    swapped=False
    for j in range(0,n -i -1):
        if array[j]>array[j+1]:
            array[j],array[j+1]=array[j+1],array[j]
            swapped=True
    if not swapped:
        break
for i in range(n):
    print(array[i],end=" ")
print()
```

Check

	Input	Expected	Got	
✓	6 3 4 8 7 1 2	1 2 3 4 7 8	1 2 3 4 7 8	✓
✓	6 9 18 1 3 4 6	1 3 4 6 9 18	1 3 4 6 9 18	✓
✓	5 4 5 2 3 1	1 2 3 4 5	1 2 3 4 5	✓

Passed all tests! ✓