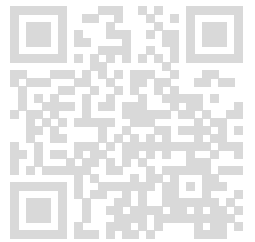


Codekata Report:



Name: Mohammed

Email: sinwanmohammed022@gmail.com

1. Problem Statement: Write a code to get the input in the given format and print the output in the given format

Input Description: A single line contains integers separated by space

Output Description: Print the integer list of integers separated by space

Sample Input: 2 3 4 5 6 7 8

Sample Output: 2 3 4 5 6 7 8

Explanation: self

Input Description:

A single line contains integers separated by space

Output Description:

Print the integer list of integers separated by space

Completion Status: Completed

Concepts Included:

Input/Output

Language Used: PYTHON 3

Source Code:

```
a=input()
print(a)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 3 4 5 6 7 8

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

12 13 14 15 16 17 18

Compilation Status: Passed

Execution Time:

0.01s

2. Problem Statement: You are provided with a number check whether its odd or even. Print "Odd" or "Even" for the corresponding cases. **Note:** In case of a decimal, Round off to nearest integer and then find the output. In case the input is zero, print "Zero".

Input Description: A number is provided as the input.

Output Description: Find out whether the number is odd or even. Print "Odd" or "Even" for the corresponding cases. **Note:** In case of a decimal, Round off to nearest integer and then find the output. In case the input is zero, print "Zero".

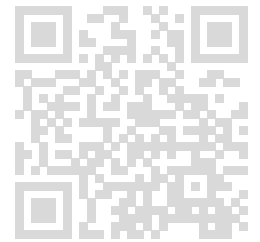
Explanation: $2\%2 = 0.2$ is an even number.

Sample Input: 2

Sample Output: Even

Input Description:

A number is provided as the input.

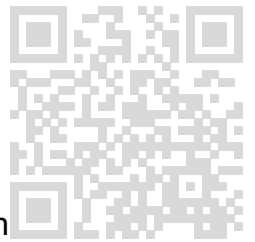


Output Description:

Find out whether the number is odd or even.

Print "Odd" or "Even" for the corresponding cases.

Note: In case of a decimal, Round off to nearest integer and then find the output. In case the input is zero, print "Zero".



Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
num = int(input())

rounded_num = round(num)
if rounded_num == 0:
    print("Zero")
elif rounded_num % 2 == 0:
    print("Even")
else:
    print("Odd")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Even

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Odd

Compilation Status: Passed

Execution Time:

0.01s

3. Problem Statement: Write a code to get the input in the given format and print the output in the given format.

Input Description: First-line indicates two integers which are the size of array and 'K' value. Second-line indicates an integer contains elements of an array.

Output Description: Print the taken input in the same format.

Sample Input: 5 31 2 3 4 5

Sample Output: 5 31 2 3 4 5

****Explanation:**** self

Input Description:

First-line indicates two integers which are the size of array and 'K' value.
Second-line indicates an integer contains elements of an array.

Output Description:

Print the taken input in the same format.

Completion Status: Completed

Concepts Included:

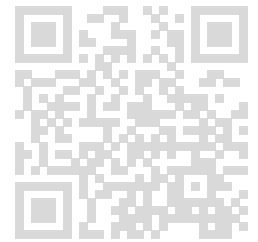
Input/Output

Language Used: PYTHON 3

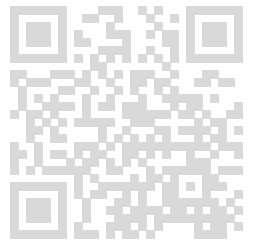
Source Code:

```
input1=input( )
```

```
input2=input( )
```



```
print(input1)
print(input2)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 3
1 2 3 4 5

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4 2
1 4 3 2

Compilation Status: Passed

Execution Time:

0.01s

4. Problem Statement: Write a code to get the input in the given format and print the output in the given format.

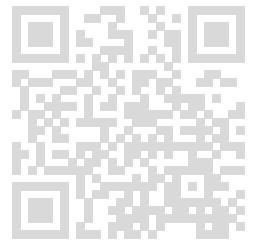
Input Description: A single line contains three float values separated by space.

Output Description: Print the float value separated by line.

Explanation:self

Sample Input:2.3 4.5 7.8

Sample Output:2.34.57.8



Input Description:

A single line contains three float values separated by space.

Output Description:

Print the float value separated by line.

Completion Status: Completed

Concepts Included:

Input/Output

Language Used: PYTHON 3

Source Code:

```
a,b,c=input().split()
```

```
print(a)  
print(b)  
print(c)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
2.3  
4.5  
7.8
```

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1.2
3.4
5.6

Compilation Status: Passed

Execution Time:

0.01s

5. Problem Statement: Write a code to get the input in the given format and print the output in the given format

Input Description: First-line indicates two integers separated by space. Second-line indicates three integers separated by space. Third-line indicates three integers separated by space

Output Description: Print the input in the same format.

Explanation: self

Sample Input: 2 52 5 62 4 5

Sample Output: 2 52 5 62 4 5

Input Description:

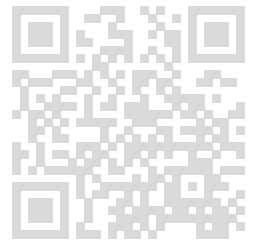
First-line indicates two integers separated by space. Second-line indicates three integers separated by space. Third-line indicates three integers separated by space

Output Description:

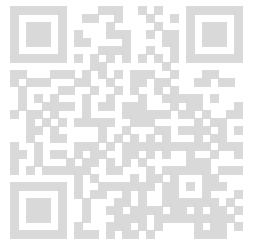
Print the input in the same format.

Completion Status: Completed

Concepts Included:



Input/Output



Language Used: PYTHON 3

Source Code:

```
a=input()
b=input()
c=input()
```

```
print(a)
print(b)
print(c)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
2 5
2 5 6
2 4 5
```

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

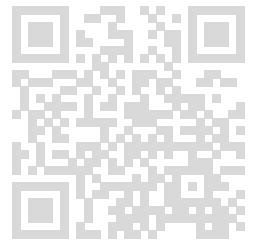
```
1 2
1 2 4
1 2 3
```

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Compilation Status: Passed

Execution Time:

0.012s



6. Problem Statement: Write a code to get the input in the given format and print the output in the given format

Input Description: To take an integer value

Output Description: Print the integer value

Sample Input: 2

Sample Output: 2

Explanation: self

Input Description:

To take an integer value

Output Description:

Print the integer value

Completion Status: Completed

Concepts Included:

Input/Output

Language Used: PYTHON 3

Source Code:

```
a=input()
print(a)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.014s

7. Problem Statement: Write a code to get the input in the given format and print the output in the given format

Input Description: First-line indicates two integers separated by space. Second-line indicates two integers separated by space. Third-line indicates two integers separated by space.

Output Description: Print the input in the same format.

Sample Input: 2 42 42 4

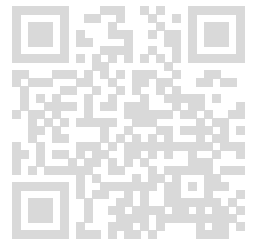
Sample Output: 2 42 42 4

Explanation: self

Input Description:

First-line indicates two integers separated by space. Second-line indicates two integers separated by space. Third-line indicates two integers separated by space.

Output Description:



Print the input in the same format.

Completion Status: Completed

Concepts Included:

Input/Output

Language Used: PYTHON 3

Source Code:

```
a=input()
b=input()
c=input()
```

```
print(a)
print(b)
print(c)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
2 4
2 4
2 4
```

Compilation Status: Passed

Execution Time:

0.01s

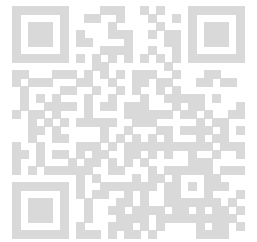
TestCase2:

Input:

< hidden >

Expected Output:

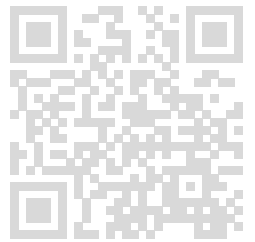
< hidden >



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Output:

1 3
2 3
4 5



Compilation Status: Passed

Execution Time:

0.01s

8. Problem Statement: Write a code to get the input in the given format and print the output in the given format

Input Description: Three integers are given in line by line.

Output Description: Print the integers in a single line separate by space.

Explanation: self

Sample Input: 245

Sample Output: 2 4 5

Input Description:

Three integers are given in line by line.

Output Description:

Print the integers in a single line separate by space.

Completion Status: Completed

Concepts Included:

Input/Output

Language Used: PYTHON 3

Source Code:

```
a=input()
b=input()
c=input()

print(a,b,c)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 4 5

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

9 9 9

Compilation Status: Passed

Execution Time:

0.01s

9. Problem Statement: Write a code to get the input in the given format and print the output in the given format

Input Description: A single line contains a string.

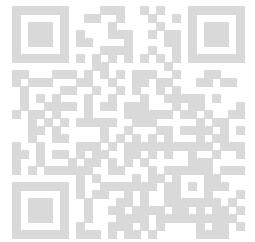
Output Description: Print the characters in a string separated by space.

Sample Input: guvi

Sample Output: g u v i

Explanation: self

Input Description:



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A single line contains a string.

Output Description:

Print the characters in a string separated by space.

Completion Status: Completed

Concepts Included:

Input/Output

Language Used: PYTHON 3

Source Code:

```
a=input()
b=" ".join(a)
print(b)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

g u v i

Compilation Status: Passed

Execution Time:

0.009s

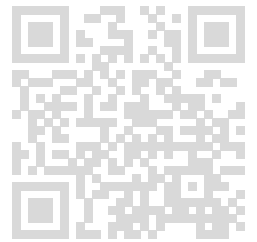
TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

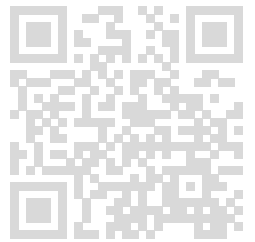


Output:

c o d e k a t a

Compilation Status: Passed**Execution Time:**

0.01s



10. Problem Statement:Write a code to get the input in the given format and print the output in the given format.

Input Description:A single line contains a string.

Output Description:Print the characters in a string separated by comma.

Explanation:self

Sample Input:guvi

Sample Output:g,u,v,i

Input Description:

A single line contains a string.

Output Description:

Print the characters in a string separated by comma.

Completion Status: Completed**Concepts Included:**

Input/Output

Language Used: PYTHON 3**Source Code:**

```
a=input()
b="".join(a)
print(b)
```

Compilation Details:**TestCase1:****Input:**

< hidden >

Expected Output:

< hidden >

Output:

g,u,v,i

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

h,e,l,l,o

Compilation Status: Passed

Execution Time:

0.01s

11. Problem Statement: Write a code to get the input and print it 5 times.

Input Description: A single line contains an integer N.

Output Description: Output contains 5 lines with each line having the value N.

Explanation: The value N has been written 5 times.

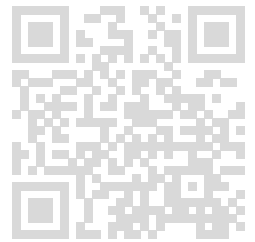
Sample Input: 4

Sample Output: 44444

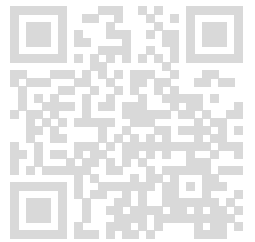
Input Description:

A single line contains an integer N.

Output Description:



Output contains 5 lines with each line having the value N.



Completion Status: Completed

Concepts Included:

absolute beginner

basics

Looping

Language Used: PYTHON 3

Source Code:

```
N=int(input())  
for i in range(5):  
    print(N)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5
5
5
5
5

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10
10
10
10
10

Compilation Status: Passed

Execution Time:

0.009s

12. Problem Statement: Write a code get an integer number as input and print the sum of the digits.

Input Description: A single line containing an integer.

Output Description: Print the sum of the digits of the integer.

Explanation: $1+2+4=7$

Sample Input: 124

Sample Output: 7

Input Description:

A single line containing an integer.

Output Description:

Print the sum of the digits of the integer.

Completion Status: Completed

Concepts Included:

absolute beginner

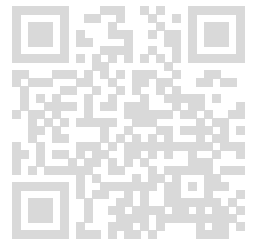
basics

Looping

Language Used: PYTHON 3

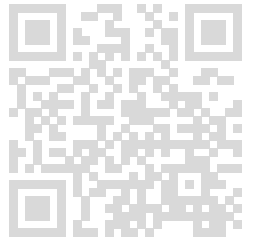
Source Code:

```
def sum_of_digits(number):
```



```
number_str = str(number)
digit_sum = 0
for digit in number_str:
    digit_sum += int(digit)
return digit_sum
```

```
try:
    number = int(input())
    result = sum_of_digits(number)
    print(result)
except ValueError:
    print("Invalid input. Please enter an integer.")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

45

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

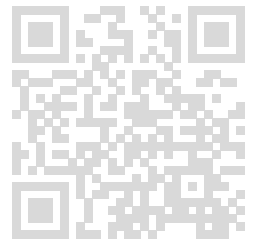
49

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.009s



13. Problem Statement: Write a code to get the input in the given format and print the output in the given format.

Input Description: A single line contains a string.

Output Description: Print the characters in a string separated by line.

Sample Input: guvigeek

Sample Output: guvigeek

Explanation: self

Input Description:

A single line contains a string.

Output Description:

Print the characters in a string separated by line.

Completion Status: Completed

Concepts Included:

Input/Output

Language Used: PYTHON 3

Source Code:

```
x=input("")
for i in x:
    print(i)
```

Compilation Details:

TestCase1:

Input:

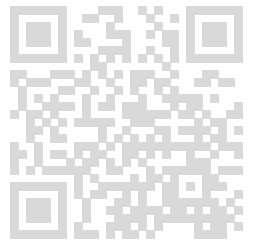
< hidden >

Expected Output:

< hidden >

Output:

g
u
v
i
g
e
e
k



Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

c
o
d
e

Compilation Status: Passed

Execution Time:

0.01s

14. Problem Statement:You are provided with the radius of a circle "A". Find the length of its circumference. Note: In case the output is coming in decimal, roundoff to 2nd decimal place. In case the input is a negative number, print "Error".

Input Description:The Radius of a circle is provided as the input of the program.

Output Description:Calculate and print the Circumference of the circle corresponding to the input radius up to two decimal places.

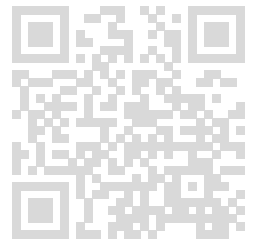
Explanation:Circumference of a Circle = $2 \times (22/7) \times r$ where 22/7 represents 'pie' and r represents the radius of the circle.

Sample Input:2

Sample Output:12.57

Input Description:

The Radius of a circle is provided as the input of the program.



Output Description:

Calculate and print the Circumference of the circle corresponding to the input radius up to two decimal places.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
import math
A=float(input())
C=(2 * math.pi * A)
print("{:0.2f}".format(C))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

12.57

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2.51

Compilation Status: Passed

Execution Time:

0.011s

15. Problem Statement: You are given Two Numbers, A and B. If $C = A + B$. Find C. Note: Round off the output to a single decimal place.

Input Description: You are provided with two numbers A and B.

Output Description: Find the sum of the two numbers ($A + B$)

Explanation: $1+1 = 2$

Sample Input: 11

Sample Output: 2

Input Description:

You are provided with two numbers A and B.

Output Description:

Find the sum of the two numbers ($A + B$)

Completion Status: Completed

Concepts Included:

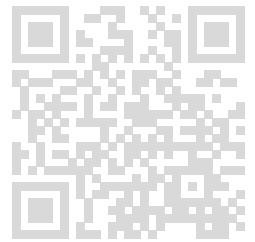
absolute beginner

Language Used: PYTHON 3

Source Code:

```
A = int(input())
B = int(input())
C = (A + B)
print(C)
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

20

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

27

Compilation Status: Passed

Execution Time:

0.01s

16. Problem Statement: You are provided with a number, "N". Find its factorial.

Input Description: A positive integer is provided as an input.

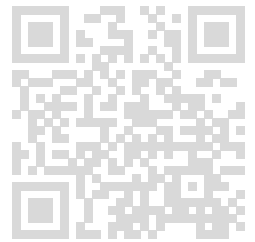
Output Description: Print the factorial of the integer.

Explanation: $2! = 2 \times 1 = 2$

Sample Input: 2

Sample Output: 2

Input Description:



Mohammed (sinwanmohammed022@gmail.com)

A positive integer is provided as an input.

Output Description:

Print the factorial of the integer.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
def factorial(n):  
    """Calculates the factorial of a positive integer."""  
    if n < 0:  
        return "Factorial is not defined for negative numbers"  
    elif n == 0:  
        return 1  
    else:  
        result = 1  
        for i in range(1, n + 1):  
            result *= i  
        return result  
  
try:  
    N = int(input())  
    if N < 0:  
        print("Factorial is not defined for negative numbers")  
    else:  
        fact = factorial(N)  
        print(fact)  
except ValueError:  
    print("Invalid input. Please enter a positive integer.")
```

Compilation Details:

TestCase1:

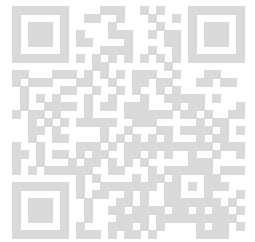
Input:

< hidden >

Expected Output:

< hidden >

Output:



24

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6

Compilation Status: Passed

Execution Time:

0.009s

17. Problem Statement: You are given with a number A i.e. the temperature in Celcius. Write a program to convert this into Fahrenheit. Note: In case of decimal values, round-off to two decimal places.

Input Description: A number is provided in Celcius as the input of the program.

Output Description: The output shall be the temperature converted into Fahrenheit corresponding to the input value print up to two decimal places and round off if required.

Explanation: $(X^{\circ}\text{C} \times 9/5) + 32 = 32^{\circ}\text{F}$ Here X is the input

Sample Input: 12

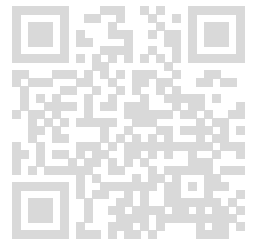
Sample Output: 53.60

Input Description:

A number is provided in Celcius as the input of the program.

Output Description:

The output shall be the temperature converted into Fahrenheit corresponding to the input value print up to two decimal places and round off if required.



Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
def celsius_to_fahrenheit(celsius):  
    fahrenheit = (celsius * 9/5) + 32  
    return round(fahrenheit, 2)  
  
try:  
    celsius = float(input())  
    fahrenheit = celsius_to_fahrenheit(celsius)  
    print(f"{fahrenheit:.2f}")  
except ValueError:  
    print("Invalid input. Please enter a number.")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

32.00

Compilation Status: Passed

Execution Time:

0.012s

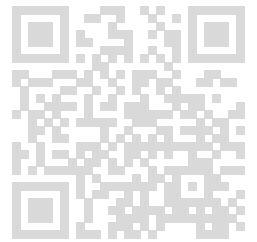
TestCase2:

Input:

< hidden >

Expected Output:

< hidden >



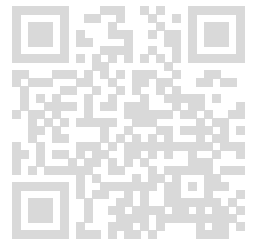
Mohammed (sinwanmohammed022@gmail.com)

Output:

69.80

Compilation Status: Passed**Execution Time:**

0.014s



18. Problem Statement: Write a code to get an integer N and print values from 1 till N in a separate line.

Input Description: A single line contains an integer N.

Output Description: Print the values from 1 to N in a separate line.

Sample Input: 5

Sample Output: 12345

Explanation: The values from 1 upto N is printed.

Input Description:

A single line contains an integer N.

Output Description:

Print the values from 1 to N in a separate line.

Completion Status: Completed**Concepts Included:**

absolute beginner

basics

Looping

Language Used: PYTHON 3**Source Code:**

```
N = int(input())
for i in range(1,N+1):
    print(i)
```

Compilation Details:

TestCase1:

Input:

< hidden >

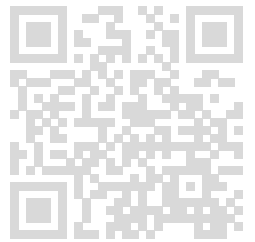
Expected Output:

< hidden >

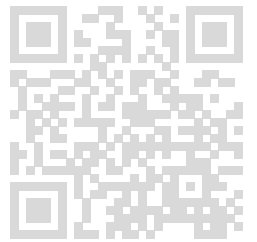
Output:

1
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5
6
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9
10
11
12
13
14
15
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18
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43

Mohammed (sinwanmohammed022@gmail.com)

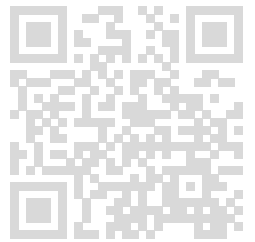


44
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96
97



Mohammed (sinwanmohammed022@gmail.com)

98
99
100



Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1
2
3
4
5
6
7
8
9
10

Compilation Status: Passed

Execution Time:

0.014s

Mohammed (sinwanmohammed022@gmail.com)

19. Problem Statement:Write a code to get an integer N and print the sum of values from 1 to N.

Input Description:A single line contains an integer N.

Output Description:Print the sum of values from 1 to N.

Explanation:The sum of values from 1-10 is 55.

Sample Input:10

Sample Output:55

Input Description:

A single line contains an integer N.

Output Description:

Print the sum of values from 1 to N.

Completion Status: Completed

Concepts Included:

absolute beginner

basics

Looping

Language Used: PYTHON 3

Source Code:

```
N = int(input())
sum = (N * (N+1))/2
print(sum)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5050.0

Compilation Status: Passed

Execution Time:

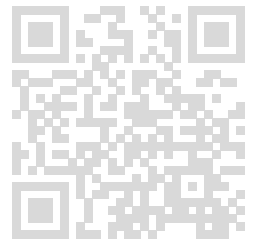
0.009s

TestCase2:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

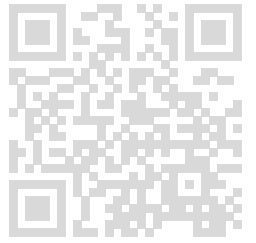
Output:

1225.0

Compilation Status: Passed

Execution Time:

0.01s



20. Problem Statement: You are given with a number "N", find its cube.

Input Description: A positive integer is provided.

Output Description: Find the cube of the number.

Sample Input: 2

Sample Output: 8

Explanation: 2 Cube is $2^3 = 8$

Input Description:

A positive integer is provided.

Output Description:

Find the cube of the number.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
N = int(input())
cube = N * (N*N)
print(cube)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-8

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.009s

21. Problem Statement: The area of an equilateral triangle is $\frac{1}{4}(\sqrt{3}a^2)$ where "a" represents a side of the triangle. You are provided with the side "a". Find the area of the equilateral triangle.

Input Description: The side of an equilateral triangle is provided as the input.

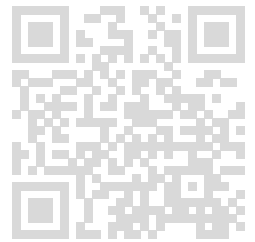
Output Description: Find the area of the equilateral triangle and print the answer up to 2 decimal places after rounding off.

Explanation: Area of Triangle = $\frac{1}{2} \times \text{base} \times \text{height}$

Area = $\frac{1}{2} \times a \times \frac{1}{2}(\sqrt{3}a)$ when a = 20 Area = 173.21

Sample Input: 20

Sample Output: 173.21



Input Description:

The side of an equilateral triangle is provided as the input.

Output Description:

Find the area of the equilateral triangle and print the answer up to 2 decimal places after rounding off.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
import math

def equilateral_triangle_area(side):

    area = (math.sqrt(3) / 4) * (side ** 2)
    return round(area, 2)

try:
    side = float(input())
    area = equilateral_triangle_area(side)
    print(f"{area:.2f}")
except ValueError:
    print("Invalid input. Please enter a number.")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

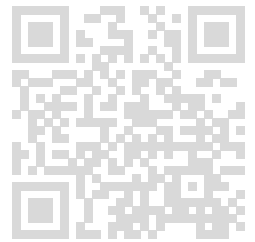
< hidden >

Output:

173.21

Compilation Status: Passed

Execution Time:



0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4243.96

Compilation Status: Passed

Execution Time:

0.01s

22. Problem Statement:You will be provided with a number. Print the number of days in the month corresponding to that number.
Note: In case the input is February, print 28 days. If the Input is not in valid range print "Error".

Input Description:The input is in the form of a number.

Output Description:Find the days in the month corresponding to the input number.Print Error if the input is not in a valid range.

Explanation:8 corresponds to august month.There are 31 days in the month of August.

Sample Input:8

Sample Output:31

Input Description:

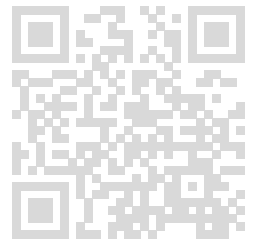
The input is in the form of a number.

Output Description:

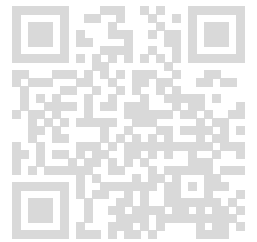
Find the days in the month corresponding to the input number.
Print Error if the input is not in a valid range.

Completion Status: Completed

Concepts Included:



absolute beginner



Language Used: PYTHON 3

Source Code:

```
def days_in_month(month_number):  
  
    if month_number == 1 or month_number == 3 or month_number == 5 or  
    month_number == 7 or month_number == 8 or month_number == 10 or  
    month_number == 12:  
        return 31  
    elif month_number == 4 or month_number == 6 or month_number == 9 or  
    month_number == 11:  
        return 30  
    elif month_number == 2:  
        return 28  
    else:  
        return "Error"  
  
try:  
    month_number = int(input())  
    days = days_in_month(month_number)  
    print(days)  
except ValueError:  
    print("Error")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Error

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Error

Compilation Status: Passed

Execution Time:

0.01s

23. Problem Statement: Write a code to get an integer N and print the digits of the integer.

Input Description: A single line contains an integer N.

Output Description: Print the digits of the integer in a single line separated by space,

Explanation: The digits are splitted and displayed.

Sample Input: 348

Sample Output: 3 4 8

Input Description:

A single line contains an integer N.

Output Description:

Print the digits of the integer in a single line separated by space,

Completion Status: Completed

Concepts Included:

absolute beginner

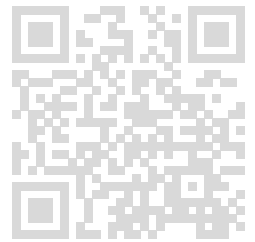
basics

Looping

Language Used: PYTHON 3

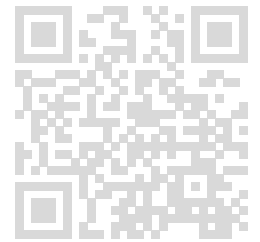
Source Code:

```
# Read input
```



```
N = input().strip()
```

```
# Print each digit separated by space  
print(" ".join(N))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 4 5 6 3 5 6

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 3 4 6

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

7 8 6 9 7

Compilation Status: Passed**Execution Time:**

0.011s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

3 4 5

Compilation Status: Passed**Execution Time:**

0.01s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

6 5 4 3 4 5 6 7 8 8 6 5 4 3 4 5 6 7

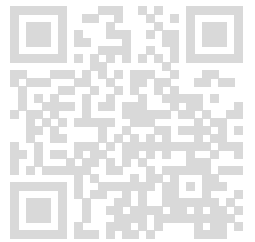
Compilation Status: Passed**Execution Time:**

0.009s

24. Problem Statement:Write a code get an integer number as input and print the odd and even digits of the number separately.

Input Description:A single line containing an integer.

Output Description:Print the even and odd integers of the integer in a separate line.

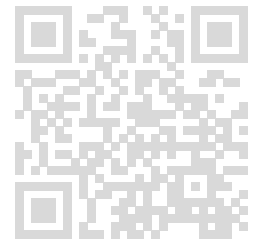


Mohammed (sinwanmohammed022@gmail.com)

Sample Input:1234

Sample Output:2 41 3

Explanation:4 and 2 are even, 3 and 1 are odd.



Input Description:

A single line containing an integer.

Output Description:

Print the even and odd integers of the integer in a separate line.

Completion Status: Not Completed

Concepts Included:

basics

absolute beginner

Looping

Language Used: PYTHON 3

Source Code:

```
# Read input number as string
number = input()

# Initialize empty strings to maintain order
even_digits = []
odd_digits = []

# Traverse each digit in order
for digit in number:
    if digit.isdigit():
        if int(digit) % 2 == 0:
            even_digits.append(digit)
        else:
            odd_digits.append(digit)

# Print even and odd digits in the order they appear
print(" ".join(even_digits))
print(" ".join(odd_digits))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 4 2

3 3 3

Compilation Status: Failed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 2 2 4

5 3 5 5 3

Compilation Status: Failed

Execution Time:

0.011s

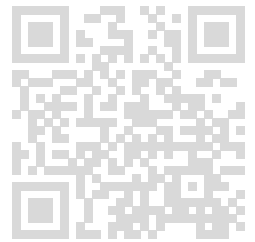
25. Problem Statement:In a garage the service man takes 10 minutes to service one car.If there are N cars in garage and X is number of minutes after which one person arrives,Calculate how much time last person has to wait in garage.(Print answer in minutes)

Input Description:You are given Two numbers 'N' and 'X'

Output Description:Waiting time of last person

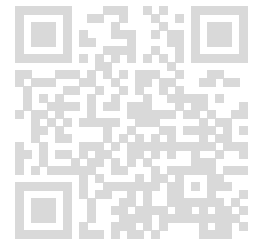
Explanation:1 2 3 4 as servicing 1 is going on 2 and 3 will enter now as servicing of 2 is going on after 5 minutes 4 will enter so he has to wait 5 minutes so that service of 2 gets over and 10 minutes for 3 to get over total of 15 mins

Sample Input:4 5



Mohammed (sinwanmohammed022@gmail.com)

Sample Output:15



Input Description:

You are given Two numbers 'N' and 'X'

Output Description:

Waiting time of last person

Completion Status: Not Completed

Concepts Included:

mathematics

time

numbers

Language Used: PYTHON 3

Source Code:

```
def calculate_waiting_time(n_cars, arrival_interval):  
    """Calculates the waiting time for the last person."""  
    total_service_time = n_cars * 10 # Total service time in minutes  
    total_arrival_time = (n_cars - 1) * arrival_interval # Total arrival time in minutes  
  
    waiting_time = total_service_time - total_arrival_time  
    return waiting_time  
  
try:  
    n, x = map(int, input().split()) # Read N and X from input  
  
    waiting_time = calculate_waiting_time(n, x)  
    print(waiting_time)  
  
except ValueError:  
    print("Invalid input. Please enter two integers separated by a space.")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

38

Compilation Status: Failed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

25

Compilation Status: Failed

Execution Time:

0.01s

26. Problem Statement: Given a string S of length N, print all permutations of the string in a separate line.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: 123

Sample Output: 123231321213312132

Completion Status: Completed

Concepts Included:

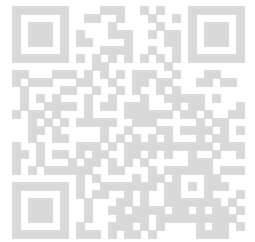
array

strings

data structures

Accolite

Amazon



Cisco

Citrix

MAQ-Software

OYO-Rooms

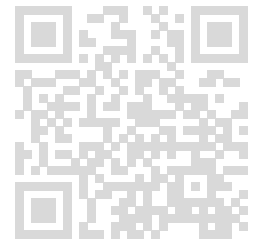
Samsung

Snapdeal

Walmart

Zoho

guvi-learning-path



Language Used: PYTHON 3

Source Code:

```
import itertools
```

```
def print_permutations(s):  
    """Prints all permutations of a string."""  
    permutations = list(itertools.permutations(s))  
    for permutation in permutations:  
        print("".join(permutation))
```

```
try:  
    s = input()  
    print_permutations(s)  
except Exception as e:  
    print(f"Error: {e}")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ab
ba

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

a

Compilation Status: Passed

Execution Time:

0.012s

27. Problem Statement: You are given a number 'n'. You have to tell whether a number is great or not. A great number is a number whose sum of digits let (m) and product of digits let(j) when summed together gives the number back $m+j=n$

Input Description: You are given a number n;

Output Description: Print Great if a number is great else print the no

Explanation: $5+9=14$ $5*9=45$ $14+45=59$ (n)

Sample Input: 59

Sample Output: Great

Input Description:

You are given a number n;

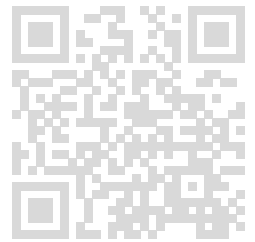
Output Description:

Print Great if a number is great else print the no

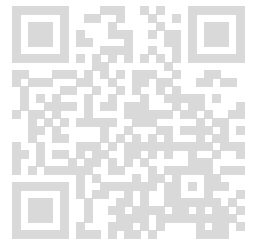
Completion Status: Completed

Concepts Included:

mathematics



numbers



Language Used: PYTHON 3

Source Code:

```
def is_great_number(n):  
    """Checks if a number is a great number."""  
    n_str = str(n)  
    sum_digits = 0  
    product_digits = 1  
  
    for digit in n_str:  
        digit_int = int(digit)  
        sum_digits += digit_int  
        product_digits *= digit_int  
  
    if sum_digits + product_digits == n:  
        return "Great"  
    else:  
        return "no"  
  
try:  
    n = int(input())  
    result = is_great_number(n)  
    print(result)  
except ValueError:  
    print("Invalid input. Please enter an integer.")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Great

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

28. Problem Statement: Given a number N, print yes if the number is a multiple of 7 else print no.

Input Description: The input consists of a single integer N.

Output Description: Print 'yes' if N is a multiple of 7, otherwise print 'no'.

Sample Input: 49

Sample Output: yes

Completion Status: Completed

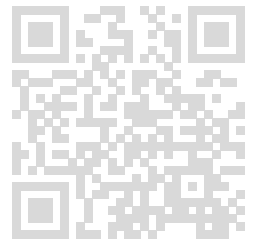
Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
def is_multiple_of_7(n):  
    """Checks if a number is a multiple of 7."""  
    if n % 7 == 0:  
        return "yes"  
    else:  
        return "no"  
  
try:  
    N = int(input())  
    result = is_multiple_of_7(N)  
    print(result)  
except ValueError:  
    print("Invalid input. Please enter an integer.")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

29. Problem Statement:Write a code to get 2 integers as input and find the HCF of the 2 integer without using recursion or Euclidean algorithm.

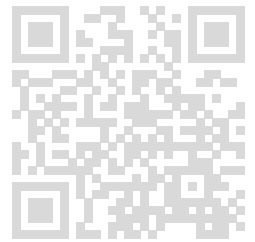
Input Description:A single line containing 2 integers separated by space.

Output Description:Print the HCF of the integers.

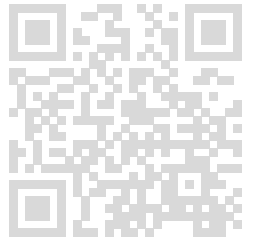
Explanation:The HCF of 2 and 3 is 1 as they are prime numbers.

Sample Input:2 3

Sample Output:1



Mohammed (sinwanmohammed022@gmail.com)



Input Description:

A single line containing 2 integers separated by space.

Output Description:

Print the HCF of the integers.

Completion Status: Completed

Concepts Included:

absolute beginner

basics

Looping

Language Used: PYTHON 3

Source Code:

```
def HCF(a,b):  
    if a == 0:  
        return b  
    if b == 0:  
        return a  
    min_val = min(a,b)  
    hcf = 1  
  
    for i in range (1,min_val+1):  
        if a % i == 0 and b % i == 0:  
            hcf = i  
    return hcf  
  
str_input = input ()  
numbers = str_input.split()  
int_1 = int(numbers[0])  
int_2 = int(numbers[1])  
  
result = HCF(int_1,int_2)  
print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

19

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

15

Compilation Status: Passed

Execution Time:

0.01s

30. Problem Statement: Given a number N followed by a list of N numbers. Write a program to reverse the list and print the list.

Input Description: $1 \leq N \leq 10000$

Output Description: The reversed list, with elements separated by '->'.

Sample Input: 7 1 2 3 4 5 6 7

Sample Output: 7->6->5->4->3->2->1

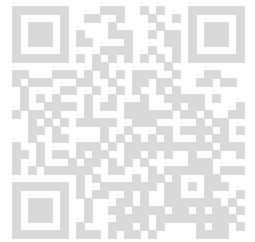
Completion Status: Completed

Concepts Included:

data structures

companies

Language Used: PYTHON 3



Source Code:

```
N = int(input().strip())  
arr = list(map(int,input().split()))  
arr.reverse()  
print("->".join(map(str, arr)))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5->4->3->1->2->1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

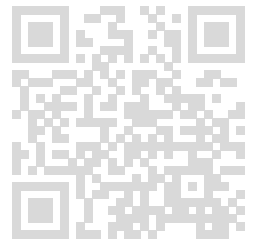
8->8->7->6->1->3->3->1

Compilation Status: Passed

Execution Time:

0.009s

31. Problem Statement:Write a program to get a string as input and reverse the string without using temporary variable.



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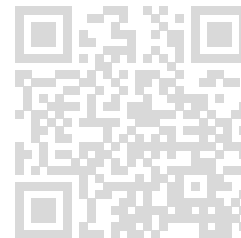
Input Description:A single line containing a string.

Output Description:Print the reversed string.

Explanation:The string is reversed.

Sample Input:GUVI

Sample Output:IVUG



Input Description:

A single line containing a string.

Output Description:

Print the reversed string.

Completion Status: Completed

Concepts Included:

absolute beginner

basics

bit manipulation

Looping

Language Used: PYTHON 3

Source Code:

```
s = input()
print(s[::-1])
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

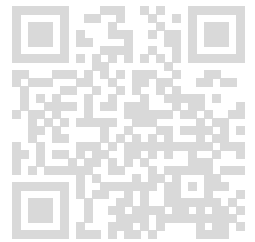
elgooG

Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.012s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

koobecaf

Compilation Status: Passed

Execution Time:

0.01s

32. Problem Statement: Write a code to get an integer N and print the even values from 1 till N in a separate line.

Input Description: A single line contains an integer N.

Output Description: Print the even values from 1 to N in a separate line.

Explanation: The even values from 1 upto N is printed.

Sample Input: 6

Sample Output: 2 4 6

Input Description:

A single line contains an integer N.

Output Description:

Print the even values from 1 to N in a separate line.

Completion Status: Completed

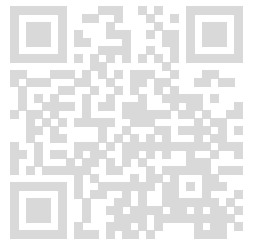
Concepts Included:

absolute beginner

basics

Looping

Language Used: PYTHON 3



Source Code:

```
N = int(input())
for i in range(1, N + 1):
    if i % 2 == 0:
        print(i)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
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90
92
94
96
98
100

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

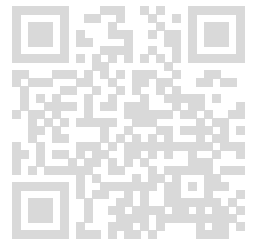
< hidden >

Expected Output:

< hidden >

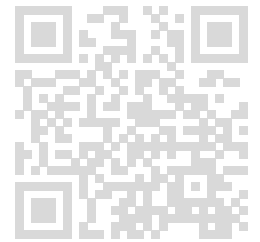
Output:

2
4
6
8
10
12
14
16
18
20
22
24



Mohammed (sinwanmohammed022@gmail.com)

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48
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Compilation Status: Passed

Execution Time:

0.011s

33. Problem Statement: You are given the coefficients of a quadratic equation in order A, B & C. Where A is the coefficient of X^2 , B is the coefficient of X and C is the constant term in the most simplified form. Example: For $X^2 + 5X + 6 = 0$, you are given the input as: 1 5 6. Write a program to find all of the roots of the quadratic. Note: The output should be up to 2nd decimal place (round off if needed) and in case of a recurring decimal use braces i.e. for eg: 0.33333..... => 0.33. Note: Use Shri Dharacharya's Method to solve i.e. $X = \{-b + \sqrt{b^2 - 4ac}\} / 2a$ & $\{-b - \sqrt{b^2 - 4ac}\} / 2a$

Input Description: Three numbers corresponding to the coefficients of x(squared), x and constant are given as an input in that particular order

Output Description: Print the two values of X after rounding off to 2 decimal places if required.

Explanation: $X = \{-b + \sqrt{b^2 - 4ac}\} / 2a$ & $\{-b - \sqrt{b^2 - 4ac}\} / 2a$ $a = 1, b = 5, c = 6$.

Sample Input: 1 5 6

Sample Output: -2.00 -3.00

Input Description:

Three numbers corresponding to the coefficients of x(squared), x and constant are given as an input in that particular order

Output Description:

Print the two values of X after rounding off to 2 decimal places if required.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
import math

a, b, c = map(float, input().split())
d = b**2 - 4*a*c

if d < 0:
    print("Complex Roots")
else:
    root1 = (-b + math.sqrt(d)) / (2 * a)
    root2 = (-b - math.sqrt(d)) / (2 * a)

# Round to 2 decimal places
print(f"{root1:.2f}")
print(f"{root2:.2f}")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1.00
-3.00

Compilation Status: Passed

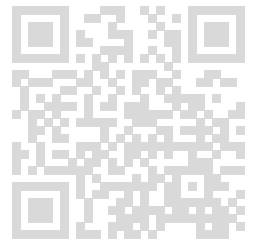
Execution Time:

0.01s

TestCase2:

Input:

< hidden >



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Expected Output:

< hidden >

Output:

0.33
-1.00

Compilation Status: Passed

Execution Time:

0.01s

34. Problem Statement: Write a code to get 2 integers A and N. Print the integer A, N times in separate line.

Input Description: First line contains an integer A. Second line contains an Integer N.

Output Description: Print the integer A, N times in a separate line.

Explanation: The integer A(2) is printed N(3) times.

Sample Input: 2 3

Sample Output: 222

Input Description:

First line contains an integer A.
Second line contains an Integer N.

Output Description:

Print the integer A, N times in a separate line.

Completion Status: Completed

Concepts Included:

absolute beginner

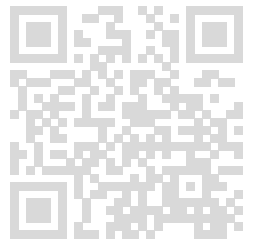
basics

Looping

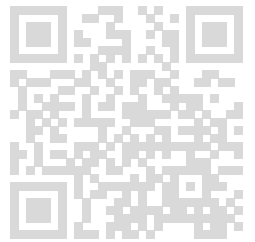
Language Used: PYTHON 3

Source Code:

```
A, N = map(int, input().split())
```



```
for _ in range(N):  
    print(A)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5
5
5
5

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10
10
10
10
10

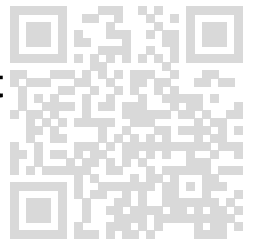
Compilation Status: Passed

Execution Time:

0.01s

35. Problem Statement: You are provided with a number "N", Find

the Nth term of the series: 1, 4, 9, 16, 25, 36, 49, 64, 81,(Print "Error" if N = negative value and 0 if N = 0).



Input Description:An integer N is provided to you as the input.

Output Description:Find the Nth term in the provided series.

Explanation:The Nth term is the series = NN
1818 = 324

Sample Input:18

Sample Output:324

Input Description:

An integer N is provided to you as the input.

Output Description:

Find the Nth term in the provided series.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
N = int(input())
```

```
if N < 0:  
    print("Error")  
elif N == 0:  
    print(0)  
else:  
    print(N * N)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

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Output:

324

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

36. Problem Statement:Let "A" be a string. Remove all the whitespaces and find it's length.**Input Description:**A string is provide as an input

Output Description:Remove all the whitespaces and then print the length of the remaining string.

Sample Input:Lorem Ipsum

Sample Output:10

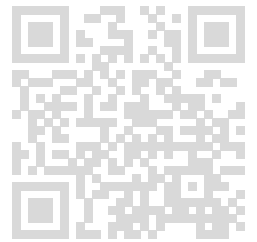
Explanation:Lorem Ipsum becomes LoremIpsum after removing the whitespaces and hence the length of this string is equal to 10.

Input Description:

A string is provide as an input

Output Description:

Remove all the whitespaces and then print the length of the remaining string.



Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
A = input()
```

```
A_no_space = A.replace(" ","")  
print (len(A_no_space))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

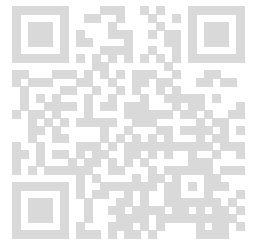
< hidden >

Output:

4

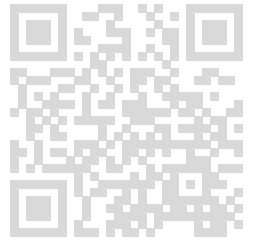
Compilation Status: Passed

Execution Time:



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0.01s



37. Problem Statement: Write a code to get an integer N and print the values from N to 1.

Input Description: A single line contains an integer N.

Output Description: Print the values from N to 1 in a separate line.

Explanation: The values from N upto 1 is printed.

Sample Input: 10

Sample Output: 10987654321

Input Description:

A single line contains an integer N.

Output Description:

Print the values from N to 1 in a separate line.

Completion Status: Completed

Concepts Included:

absolute beginner

basics

Looping

Language Used: PYTHON 3

Source Code:

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

Compilation Details:

TestCase1:

Input:

< hidden >

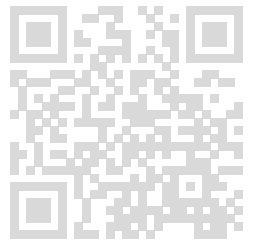
Expected Output:

< hidden >

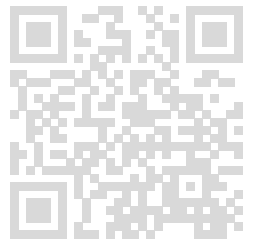
Output:

100
99
98
97
96
95
94
93
92
91
90
89
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82
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5
4
3
2
1



Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5
4
3
2
1

Compilation Status: Passed

Execution Time:

0.011s

38. Problem Statement:Let "A" be a year, write a program to check whether this year is a leap year or not. Print "Y" if its a leap year and "N" if its a common year.

Input Description:A Year is the input in the form of a positive integer.

Output Description:Print "Y" if its a leap year and "N" if its a common year.

Sample Input:2020

Sample Output:Y

Explanation:2020 is a leap year.

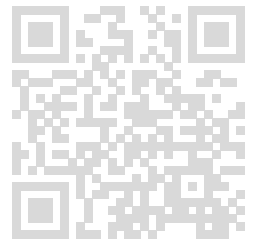
Input Description:

A Year is the input in the form of a positive integer.

Output Description:

Print "Y" if its a leap year and "N" if its a common year.

Completion Status: Completed



Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
A = int(input())

if (A % 4 == 0 and A % 100 != 0) or (A % 400 == 0):
    print("Y")
else:
    print("N")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

N

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

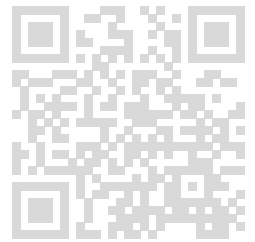
< hidden >

Output:

Y

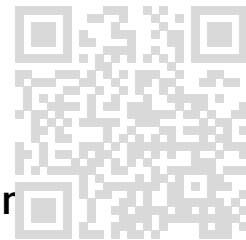
Compilation Status: Passed

Execution Time:



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0.01s



39. Problem Statement:You are given three numbers A, B & C. Print the largest amongst these three numbers.

Input Description:Three numbers are provided to you.

Output Description:Find and print the largest among the three

Sample Input:123

Sample Output:3

Explanation:3 > 2 && 1

Input Description:

Three numbers are provided to you.

Output Description:

Find and print the largest among the three

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
A = int(input())
B = int(input())
C = int(input())

largest = max(A, B, C)
print(largest)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

40. Problem Statement:You are provided with two numbers. Find and print the smaller number.

Input Description:You are provided with two numbers as input.

Output Description:Print the small number out of the two numbers.

Sample Input:23 1

Sample Output:1

Explanation:1 < 23

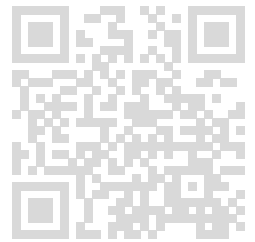
Input Description:

You are provided with two numbers as input.

Output Description:

Print the small number out of the two numbers.

Completion Status: Completed



Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
a, b = map(int, input().split())  
print(min(a, b))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

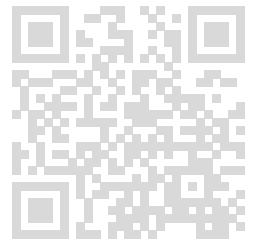
Output:

32

Compilation Status: Passed

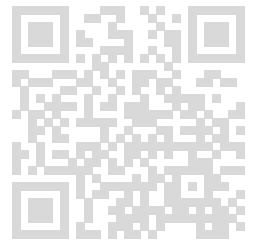
Execution Time:

0.01s



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41. Problem Statement:Using the method of looping, write a program to print the table of 9 till N in the format as follows:(N is input by the user)



9 18 27...

Print NULL if 0 is input

Input Description:A positive integer is provided as an input.

Output Description:Print the table of nine with single space between the elements till the number that is input.

Sample Input:3

Sample Output:9 18 27

Explanation:91 = 992 = 189*3 = 27

Input Description:

A positive integer is provided as an input.

Output Description:

Print the table of nine with single space between the elements till the number that is input.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
N = int(input())
if N == 0:
    print("NULL")
else:
    result = []
    for i in range(1, N + 1):
        result.append(str(9 * i))
    print(" ".join(result))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

9 18 27

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

9

Compilation Status: Passed

Execution Time:

0.009s

42. Problem Statement: You are given with Principle amount(\$), Interest Rate(%) and Time (years) in that order. Find Simple Interest. Print the output up to two decimal places (Round-off if necessary). (S.I. = PTR/100)

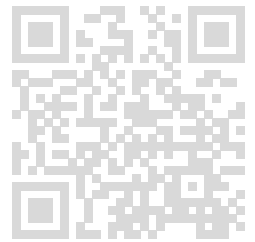
Input Description: Three values are given to you as the input. these values correspond to Principle amount, Interest Rate and Time in that particular order.

Output Description: Find the Simple interest and print it up to two decimal places. Round off if required.

Explanation: P = 1000 \$ T = 2 Years R = 5 % S.I. = $1000 \times 2 \times 5 / 100 = 100.00$

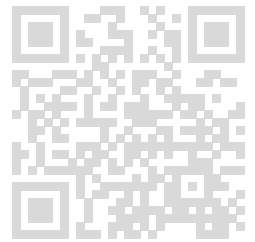
Sample Input: 1000 2 5

Sample Output: 100.00



Input Description:

Three values are given to you as the input. these values correspond to Principle amount, Interest Rate and Time in that particular order.



Output Description:

Find the Simple interest and print it up to two decimal places. Round off if required.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
P, R, T = map(float, input().split())
SI = (P * R * T) / 100
print(f"{SI:.2f}")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

100.00

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

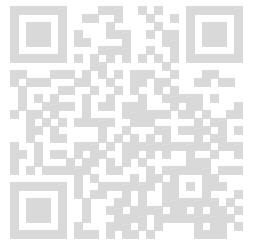
Output:

112.20

Compilation Status: Passed

Execution Time:

0.009s



43. Problem Statement:Print the First 3 multiples of the given number "N". (N is a positive integer) Note: print the characters with a single space between them.

Input Description:A positive integer is provided to you as an input.

Output Description:Print the First 3 multiples of the number with single spaces between them as an output.

Sample Input:2

Sample Output:2 4 6

Explanation:The first 3 multiples of 2 are 2 = 2*1 = 2, 4 = 2*2 = 4, 6 = 2*3 = 6 printing them with single spaces gives: 2 4 6

Input Description:

A positive integer is provided to you as an input.

Output Description:

Print the First 3 multiples of the number with single spaces between them as an output.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

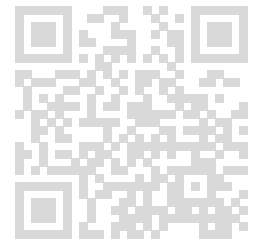
```
# Read input
```

```
N = int(input())
```

```
# Calculate the first 3 multiples
```

```
multiples = [str(N * i) for i in range(1, 4)]
```

```
# Print them with single space between  
print(" ".join(multiples))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 4 6

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4 8 12

Compilation Status: Passed

Execution Time:

0.01s

44. Problem Statement: You are given A = Length of a rectangle & B = breadth of a rectangle. Find its area "C". (A and B are natural numbers)

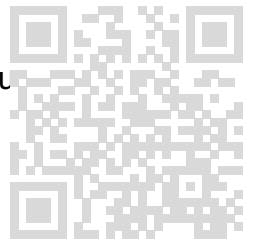
Input Description: The inputs are two natural numbers representing the length and the breadth of a rectangle.

Output Description: Find the area of the rectangle formed by the provided input. Round off the answer to the first decimal place if required.

Explanation: Area = LB = AB = $2 \times 3 = 6$

Sample Input: 23

Sample Output: 6



Input Description:

The inputs are two natural numbers representing the length and the breadth of a rectangle.

Output Description:

Find the area of the rectangle formed by the provided input. Round off the answer to the first decimal place if required.

Completion Status: Completed

Concepts Included:

absolute beginner

Language Used: PYTHON 3

Source Code:

```
A = int(input())
B = int(input())
C = (A * B)
print(C)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

144

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

30

Compilation Status: Passed

Execution Time:

0.009s

45. Problem Statement: You are given a number A in Kilometers. Convert this into B: Meters and C: Centi-Metres.

Input Description: A number "A" representing some distance in kilometer is provided to you as the input.

Output Description: Convert and print this value in meters and centimeters.

Explanation: $1 \text{ KM} = 1000 \text{ M}$ $1 \text{ M} = 100 \text{ CM}$ $1 \text{ KM} = 1000 * 100 \text{ CM} = 100000 \text{ CM}$

Sample Input: 2

Sample Output: 2000 200000

Input Description:

A number "A" representing some distance in kilometer is provided to you as the input.

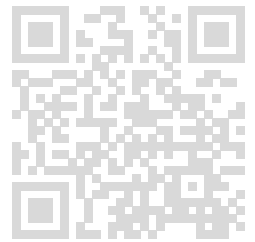
Output Description:

Convert and print this value in meters and centimeters.

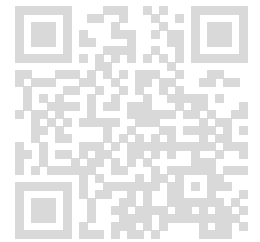
Completion Status: Completed

Concepts Included:

absolute beginner



Language Used: PYTHON 3



Source Code:

```
A = int(input())  
  
B = A * 1000  
C = A * 100000  
  
print(B)  
print(C)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2000
200000

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:


4000
400000

Compilation Status: Passed

Execution Time:

0.01s

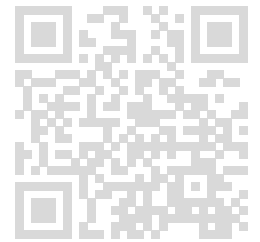
Mohammed (sinwanmohammed022@gmail.com)



```
# Read input
N = int(input())
```



```
print(catalan_number(N))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.096s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.095s

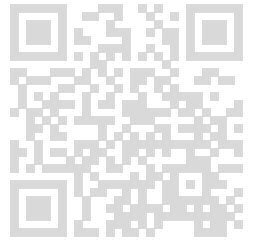
47. Problem Statement: Given a string S of length N, find if it forms a Palindrome after deleting 1 character.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: abxba

Sample Output: YES

Completion Status: Completed



Concepts Included:

strings

data structures

Language Used: PYTHON 3

Source Code:

```
def is_palindrome(s, left, right):
    while left < right:
        if s[left] != s[right]:
            return False
        left += 1
        right -= 1
    return True

def can_be_palindrome(s):
    left = 0
    right = len(s) - 1

    while left < right:
        if s[left] != s[right]:
            # Try skipping one character from either side
            return "YES" if (is_palindrome(s, left + 1, right) or is_palindrome(s, left, right - 1)) else "NO"
        left += 1
        right -= 1

    return "YES" # Already a palindrome

# Read input
s = input().strip()
print(can_be_palindrome(s))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

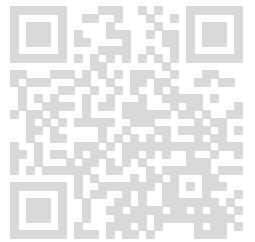
Output:

NO

Compilation Status: Passed

Execution Time:

0.01s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

YES

Compilation Status: Passed

Execution Time:

0.01s

48. Problem Statement: You are given with an array. For each element present in the array your task is to print the next smallest than that number. If it is not smallest print -1

Input Description: You are given a number 'n' representing size of array. And n space separated numbers.

Output Description: Print the next smallest number present in array and -1 if no smallest is present

Explanation: Self Explanatory

Sample Input: 7 10 7 9 3 2 1 15

Sample Output: 7 3 3 2 1 -1 -1

Input Description:

You are given a number 'n' representing size of array. And n space separated numbers.

Output Description:

Print the next smallest number present in array and -1 if no smallest is present

Completion Status: Completed

Concepts Included:

array

Amazon

Flipkart

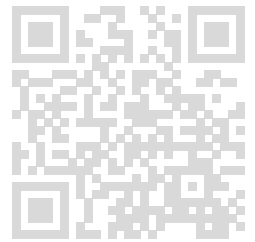
OYO-Rooms

Samsung

Snapdeal

Zoho

guvi-learning-path



Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))
```

```
result = []
for i in range(n):
    found = False
    for j in range(i+1, n):
        if arr[j] < arr[i]:
            result.append(arr[j])
            found = True
            break
    if not found:
        result.append(-1)
```

```
print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7 3 3 2 1 -1 -1

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1 -1 -1 -1 -1

Compilation Status: Passed

Execution Time:

0.01s

49. Problem Statement: You are given an array. Your task is to sort the array in given manner. Print the elements in increasing order of the frequency. If frequency is same print smaller one first.

Input Description: You are given a number 'n'. Then in next line n space separated numbers.

Output Description: Print the array as mentioned

Explanation: 2 3 1 is the descending order of the given frequency

Sample Input: 4 1 1 3 2

Sample Output: 2 3 1

Input Description:

You are given a number 'n'. Then in next line n space separated numbers.

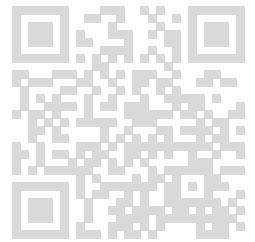
Output Description:

Print the array as mentioned

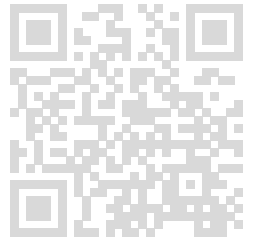
Completion Status: Completed

Concepts Included:

array



Language Used: PYTHON 3



Source Code:

```
from collections import Counter

# Input
n = int(input())
arr = list(map(int, input().split()))

# Count frequency
freq = Counter(arr)

# Sort by frequency, then by value
sorted_arr = sorted(freq.keys(), key=lambda x: (freq[x], x))

# Print result
print(*sorted_arr)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 3 1

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

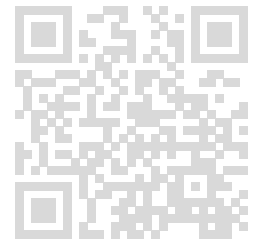
Output:

3 13 1

Compilation Status: Passed

Execution Time:

0.012s



50. Problem Statement: Assume you are a student studying in school. You are given a task to find first negative integer for each and every window of size k.

Input Description: First line contains an integer n denoting the size of the array. The next line contains n space separated integers forming the array. The last line contains the window size k.

Output Description: Print the first negative integer in that window. If all the numbers are positive print 0

Explanation: -2 -2 -3 -4 -7 are the negative numbers in the given number

Sample Input: 7 1 -2 -3 -4 5 6 -7 3

Sample Output: -2 -2 -3 -4 -7

Input Description:

First line contains an integer n denoting the size of the array. The next line contains n space separated integers forming the array. The last line contains the window size k.

Output Description:

Print the first negative integer in that window. If all the numbers are positive print 0

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
from collections import deque
```

```
# Input
n = int(input())
arr = list(map(int, input().split()))
k = int(input())
```

```
# Queue to store indices of negative numbers
```

```
q = deque()
result = []

for i in range(n):
    # Add current element index if it's negative
    if arr[i] < 0:
        q.append(i)

    # Remove out-of-window elements from queue
    while q and q[0] < i - k + 1:
        q.popleft()

    # Start recording result when first window is complete
    if i >= k - 1:
        if q:
            result.append(arr[q[0]])
        else:
            result.append(0)

print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-2 -2 -3 -4 -7

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

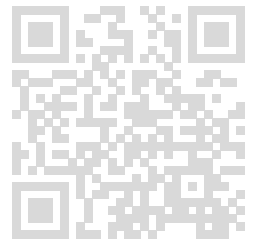
Input:

< hidden >

Expected Output:

< hidden >

Output:



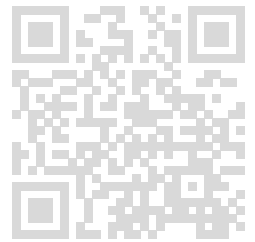
Mohammed (sinwanmohammed022@gmail.com)

0 0 0 0 0

Compilation Status: Passed

Execution Time:

0.011s



51. Problem Statement: You are given an array of non-negative integers representing height of walls at index i as A_i and the width of each block is 1. Compute how much air can be encapsulated between the walls of chamber.

Input Description: Each line contains an integer 'N' denoting the size of the array Next line contains N space separated numbers to be stored in array.

Output Description: Output the total unit of Air encapsulated between the walls of chamber.

Explanation: Air trapped by wall of height 7 is 0, by wall of height 4 is 3, by wall of height 9 is 0 Total is $0+3+0=3$

Sample Input: 3 7 4 9

Sample Output: 3

Input Description:

Each line contains an integer 'N' denoting the size of the array Next line contains N space separated numbers to be stored in array.

Output Description:

Output the total unit of Air encapsulated between the walls of chamber.

Completion Status: Completed

Concepts Included:

array

mathematics

Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))
```

Edge case

```
if n <= 2:
    print(0)
else:
    left_max = [0] * n
    right_max = [0] * n
```

```
# Fill left max array
left_max[0] = arr[0]
for i in range(1, n):
    left_max[i] = max(left_max[i-1], arr[i])
```

```
# Fill right max array
right_max[n-1] = arr[n-1]
for i in range(n-2, -1, -1):
    right_max[i] = max(right_max[i+1], arr[i])
```

```
# Calculate trapped air
air = 0
for i in range(n):
    trapped = min(left_max[i], right_max[i]) - arr[i]
    if trapped > 0:
        air += trapped
```

```
print(air)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

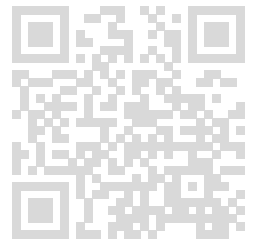
0.01s

TestCase2:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

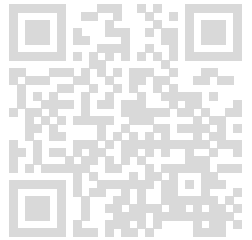
Output:

0

Compilation Status: Passed

Execution Time:

0.011s



52. Problem Statement:A person saves his monthly saving according to given schema. He saves same amount of money which is equal to the money saved in immediate previous two months. Assume, initially he saved 1000 rupees and in first month he saved another 1000. Your task is to tell how much he had totally saved at the end of 'n' months

Input Description:You will be given a number 'n'→No. of months

Output Description:Print the total savings at the end of 'n' months

Explanation:initially he is having 1000, and he saved 1000 more in first month he is having 2000 in saving account.

Sample Input:1

Sample Output:2000

Input Description:

You will be given a number 'n'→No. of months

Output Description:

Print the total savings at the end of 'n' months

Completion Status: Completed

Concepts Included:

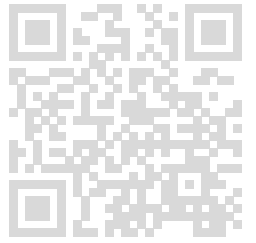
mathematics

array

Language Used: PYTHON 3

Source Code:

```
n = int(input())
```



```
# Base savings
savings = [1000, 1000]

# Generate savings up to month n
for i in range(2, n+1):
    savings.append(savings[i-1] + savings[i-2])

# Total savings from month 0 to n
print(sum(savings[:n+1]))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4000

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7000

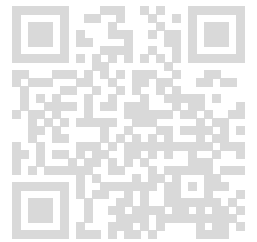
Compilation Status: Passed

Execution Time:

0.01s

53. Problem Statement: You are given a task to tell whether the

number is pure or not. A pure number is a number whose sum of digits is multiple of 3. $O(1)$ time and $O(1)$ space



Input Description: You are given a number n .

Output Description: Print yes if it is pure else not

Explanation: $1+3=4$ which is not multiple of 3

Sample Input: 13

Sample Output: not

Input Description:

You are given a number n .

Output Description:

Print yes if it is pure else not

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
n = int(input())
print("yes" if n % 3 == 0 else "not")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

not

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

not

Compilation Status: Passed

Execution Time:

0.01s

54. Problem Statement: Simi is learning about palindromic numbers. Her teacher gave him the task to count all palindromic numbers present in that range. Simi has told you about this and want your help. You design an algorithm in order to help simi.

Input Description: You will be given a number 'n'

Output Description: Print the count of all palindromic numbers till 'n'(inclusive)

Explanation: All the numbers from 1 to 5 are single digit hence they are palindromic numbers so output is 5

Sample Input: 5

Sample Output: 5

Input Description:

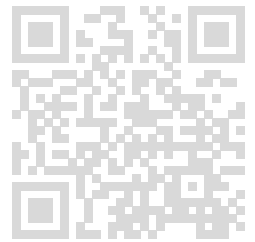
You will be given a number 'n'

Output Description:

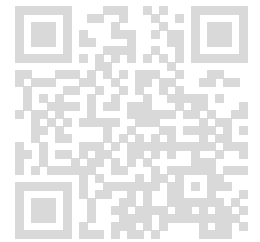
Print the count of all palindromic numbers till 'n'(inclusive)

Completion Status: Completed

Concepts Included:



mathematics



Language Used: PYTHON 3

Source Code:

```
n = int(input())
count = 0

for i in range(1, n + 1):
    if str(i) == str(i)[::-1]:
        count += 1

print(count)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

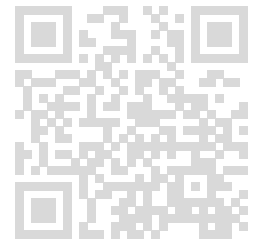
9

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.01s



55. Problem Statement: You are an employee of 'Rox Travel' channel. The channel has decided to give allowances to some customer who satisfy these conditions. The conditions are: The customer should be born on or before July 22, 1987. The month of D.O.B month should be of 31 days. You are given with the D.O.B of all the employees. Your task is to print the employee index who are having chance to avail special offer.

Input Description: First line contains the number of employee. Next line contains an array of D.O.B of employees

Output Description: Print the employee index (index at 1). Print -1 if there are no such employee

Explanation: 2nd and 3rd employee index are having chance to avail special offer.

Sample Input: 4 23 MARCH 1996 23 MARCH 1986 22 JULY 1987 23 APRIL 1987

Sample Output: 2 3

Input Description:

First line contains the number of employee. Next line contains an array of D.O.B of employees

Output Description:

Print the employee index (index at 1). Print -1 if there are no such employee

Completion Status: Completed

Concepts Included:

mathematics

numbers

Language Used: PYTHON 3

Source Code:

```
from datetime import datetime
```

```
# Months with 31 days
months_with_31_days = {"JANUARY", "MARCH", "MAY", "JULY", "AUGUST", "OCTOBER", "DECEMBER"}
```



```
# Cutoff date
cutoff = datetime.strptime("22 JULY 1987", "%d %B %Y")
```

```
# Input
n = int(input())
dob_list = input().split(" ")
```

```
# Collect qualified indices
result = []
for i in range(n):
    day = dob_list[i * 3]
    month = dob_list[i * 3 + 1].upper()
    year = dob_list[i * 3 + 2]
```

```
dob_str = f"{day} {month} {year}"
dob = datetime.strptime(dob_str, "%d %B %Y")
```

```
if dob <= cutoff and month in months_with_31_days:
    result.append(str(i + 1))
```

```
# Output
print(" ".join(result) if result else "-1")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 3 4

Compilation Status: Passed

Execution Time:

0.018s

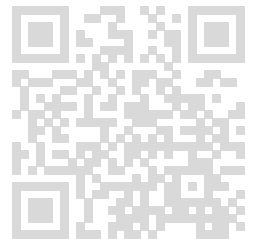
TestCase2:

Input:

< hidden >

Expected Output:

< hidden >



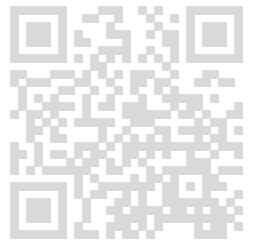
Mohammed (sinwanmohammed022@gmail.com)

Output:

2 3 4 5

Compilation Status: Passed**Execution Time:**

0.03s



56. Problem Statement: You are given an array of numbers. Print the least occurring element. If there is more than 1 element print all of them in decreasing order of their value.

Input Description: You are given a number 'n' denoting size of array. Next line contains n space separated numbers.

Output Description: Print the number as mentioned

Explanation: Self Explanatory

Sample Input: 91 6 4 56 56 56 6 4 2

Sample Output: 2 1

Input Description:

You are given a number 'n' denoting size of array. Next line contains n space separated numbers.

Output Description:

Print the number as mentioned

Completion Status: Completed**Concepts Included:**

mathematics

array

Language Used: PYTHON 3**Source Code:**

```
from collections import Counter
```

```
# Input
```

```
n = int(input())
```

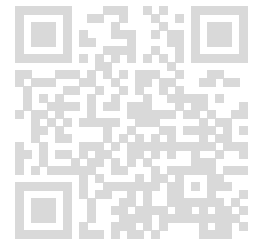
```
arr = list(map(int, input().split()))
```

```
# Count frequency
freq = Counter(arr)

# Find minimum frequency
min_freq = min(freq.values())

# Collect elements with min frequency
least_occurring = [num for num, count in freq.items() if count == min_freq]

# Sort in decreasing order and print
least_occurring.sort(reverse=True)
print(*least_occurring)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

76 25

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 0

Compilation Status: Passed

Execution Time:

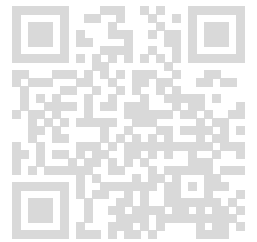
0.012s

Mohammed (sinwanmohammed022@gmail.com)

57. Problem Statement:Given a number N, print 'yes' if it is a multiple of 13 else print 'no'.

Sample Input:26

Sample Output:yes



Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
n = int(input())
print("yes" if n % 13 == 0 else "no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

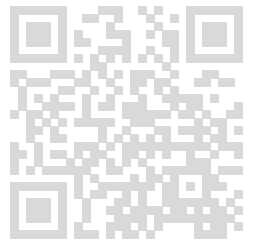
Mohammed (sinwanmohammed022@gmail.com)

Output:

no

Compilation Status: Passed**Execution Time:**

0.014s



58. Problem Statement: Assume your brother studies in class 2. He has to complete his homework on co-primes. As an elder sibling help him in finding whether the given two numbers is co-prime or not.

Input Description: You will be given two numbers 'n' and 'm'

Output Description: Your task is to tell whether numbers is co prime or not. If it is a co-prime print 1 else 0

Explanation: We see that lcm of two numbers is 15, also we know that $\text{lcm} \times \text{hcf} = \text{product of two numbers}$ so 1 is hcf, so they are co prime.

Sample Input: 3 5

Sample Output: 1

Input Description:

You will be given two numbers 'n' and 'm'

Output Description:

Your task is to tell whether numbers is co prime or not. If it is a co-prime print 1 else 0

Completion Status: Completed**Concepts Included:**

mathematics

Language Used: PYTHON 3**Source Code:**

```
import math

n, m = map(int, input().split())
print(1 if math.gcd(n, m) == 1 else 0)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

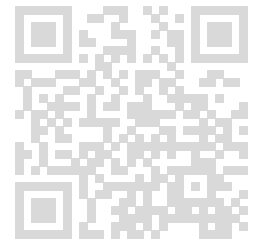
0.01s

59. Problem Statement:In XYZ country there is rule that car's engine no. depends upon car' number plate. Engine no is sum of all the integers present on car's Number plate.The issuing authority has hired you in order to provide engine no. to the cars.Your task is to develop an algorithm which takes input as in form of string(Number plate) and gives backEngine number.

Input Description:You are given a string 's'

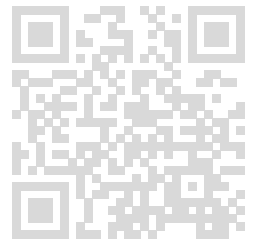
Output Description:Print the engine number

Explanation: $0+5+2+6+6+9=28$



Sample Input:HR05-AA-2669

Sample Output:28



Input Description:

You are given a string 's'

Output Description:

Print the engine number

Completion Status: Completed

Concepts Included:

mathematics

strings

Language Used: PYTHON 3

Source Code:

```
s = input()
engine_number = sum(int(char) for char in s if char.isdigit())
print(engine_number)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

28

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

22

Compilation Status: Passed

Execution Time:

0.009s

60. Problem Statement: Find the minimum among 10 numbers.

Input Description: The input consists of 10 space-separated integers.

Output Description: The output is the minimum of the given 10 integers.

Sample Input: 5 4 3 2 1 7 6 10 8 9

Sample Output: 1

Completion Status: Completed

Concepts Included:

basics

mathematics

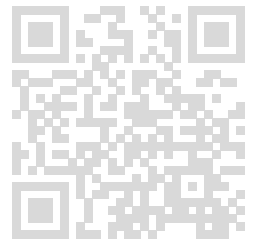
Language Used: PYTHON 3

Source Code:

```
nums = list(map(int, input().split()))  
print(min(nums))
```

Compilation Details:**TestCase1:****Input:**

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.009s

61. Problem Statement: Given 2 numbers N,M. Print 'yes' if their product is a perfect square else print 'no'.

Sample Input: 5 5

Sample Output: yes

Completion Status: Completed

Concepts Included:

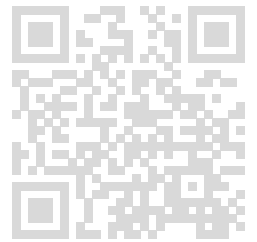
mathematics

basics

Language Used: PYTHON 3

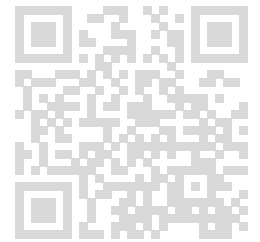
Source Code:

```
import math
```



```
n, m = map(int, input().split())
product = n * m
root = int(math.isqrt(product))

print("yes" if root * root == product else "no")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

62. Problem Statement:you are given with array of numbers.you have to find whether array is beautiful or not. A beautiful array is an array whose sum of all numbers is divisible by 2, 3 and 5

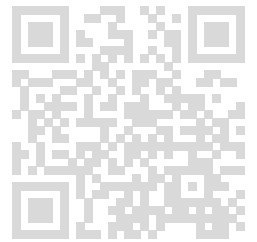
Input Description:You are given a number 'n' denoting the size of array.Next line contains n space separated numbers.

Output Description:Print 1 if array is beautiful and 0 if it is not

Explanation:Sum is 90 which is divisible by 2,3,5

Sample Input:55 25 35 -5 30

Sample Output:1



Input Description:

You are given a number 'n' denoting the size of array.Next line contains n space separated numbers.

Output Description:

Print 1 if array is beautiful and 0 if it is not

Completion Status: Completed

Concepts Included:

array

numbers

Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))

total = sum(arr)

# Check if sum is divisible by 30
print(1 if total % 30 == 0 else 0)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

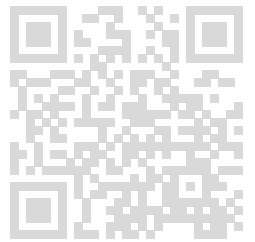
Output:

1

Compilation Status: Passed

Execution Time:

0.01s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

63. Problem Statement:You are given with an circular array .Your task is calculate the difference between two consecutive number. And if difference is greater than 'k', print 1 else print 0

Input Description:You are given two numbers 'n', 'm'. Next line contains n space separated integers.

Output Description:Print 1 if the difference is greater than 'm'.

Explanation:65-50=15 which is not greater than 15 So 0, 85-65=20>15 98-85=13

Sample Input:5 1550 65 85 98 35

Sample Output:0 1 0 1 0

Input Description:

You are given two numbers 'n', 'm'. Next line contains n space separated integers.

Output Description:

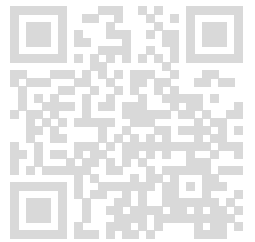
Print 1 if the difference is greater than 'm'.

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3



Source Code:

```
n, m = map(int, input().split())
arr = list(map(int, input().split()))

result = []

for i in range(n):
    diff = abs(arr[i] - arr[(i + 1) % n]) # Circular difference
    result.append(1 if diff > m else 0)

print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 1 1 1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

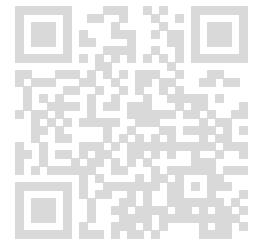
Output:

1 1 1 1 1 1 0 1 0 1

Compilation Status: Passed

Execution Time:

0.01s



64. Problem Statement: You are a passport issuer, but due to some problems in the system, there are redundant passport numbers. Your task is to delete all the duplicate passport numbers. You are given a list of passport numbers.

Input Description: You are given length of list. Second line, You are given with a list.

Output Description: Print the list of passport numbers without duplicates.

Explanation: Removed duplicate elements if any

Sample Input: 5 A23 B56 B56 C79 D16

Sample Output: A23 B56 C79 D16

Input Description:

You are given length of list. Second line, You are given with a list.

Output Description:

Print the list of passport numbers without duplicates.

Completion Status: Completed

Concepts Included:

array

set

Language Used: PYTHON 3

Source Code:

```
n = int(input())
passports = input().split()

seen = set()
unique_passports = []

for p in passports:
    if p not in seen:
        seen.add(p)
        unique_passports.append(p)
```

```
print(*unique_passports)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

11 12 13 A14 15 19 16 B18

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

A23 B56 C79 D16

Compilation Status: Passed

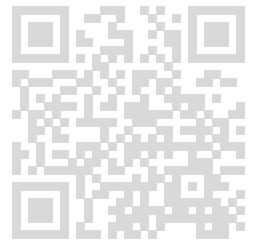
Execution Time:

0.01s

65. Problem Statement:You are given with two arrays. Your task is to merge the array such that first array is in ascending order and second one in descending order.

Input Description:First line contains two integer 'n' and 'm'. 'n' denotes length of array 1 and 'm' of array 2. Next line contains n space separated numbers and third line contains 'm' space separated numbers

Output Description:Print a single array in desired order

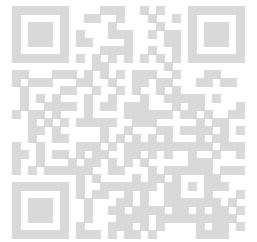


Sample Input:3 323 15 16357 65 10

Sample Output:15 16 23 357 65 10

Explanation:15 16 23 is ascending order and 357 65 10 in descending order

Hence the answer is15 16 23 357 65 10



Input Description:

First line contains two integer 'n' and 'm'. 'n' denotes length of array 1 and 'm' of array 2. Next line contains n space separated numbers and third line contains 'm' space separated numbers

Output Description:

Print a single array in desired order

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
# Input
n, m = map(int, input().split())
arr1 = list(map(int, input().split()))
arr2 = list(map(int, input().split()))

# Sort arr1 in ascending and arr2 in descending
arr1.sort()
arr2.sort(reverse=True)

# Merge and print
merged = arr1 + arr2
print(*merged)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

15 16 23 357 65 10

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 12 13 14 16 19 42 58 65 98 56 55 54 46 32 17 16

Compilation Status: Passed

Execution Time:

0.009s

66. Problem Statement: Given a number N, print the odd digits in the number(space seperated) or print -1 if there is no odd digit in the given number.

Input Description: The input consists of a single integer N, where $N \leq 100000$.

Output Description: The output should be the odd digits of N, space-separated, or -1 if no odd digits are present.

Sample Input: 2143

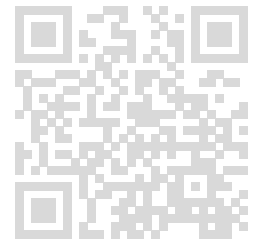
Sample Output: 1 3

Completion Status: Completed

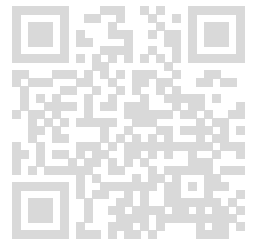
Concepts Included:

array

mathematics



Language Used: PYTHON 3



Source Code:

```
n = input()
odd_digits = [digit for digit in n if int(digit) % 2 == 1]

if odd_digits:
    print(" ".join(odd_digits))
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

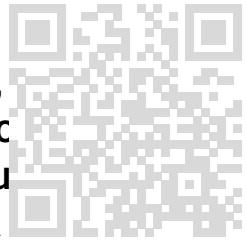
1 3

Compilation Status: Passed

Execution Time:

0.01s

67. Problem Statement:Mr.Stark wants to order the employee ids, which are recorded in a 2D matrix, in ascending order. He wants to do it so as to allot a new id to a person who joins as a fresher. You are the CTO of the Stark industries and you are asked by Mr.Stark to sort the data.



Input Description:Dimensions of the matrix m and n, followed by the elements of the matrix.

Output Description:Matrix sorted in ascending order

Explanation:The ids are sorted in ascending order of their values.

Sample Input:3 387 21 3489 32 7812 23 45

Sample Output:12 21 2332 34 4578 87 89

Input Description:

Dimensions of the matrix m and n, followed by the elements of the matrix.

Output Description:

Matrix sorted in ascending order

Completion Status: Completed

Concepts Included:

sorting

array

Language Used: PYTHON 3

Source Code:

```
# Input
m, n = map(int, input().split())
matrix = []

# Read m x n matrix elements
for _ in range(m):
    matrix.extend(map(int, input().split()))

# Sort all elements
matrix.sort()

# Output as m x n matrix
for i in range(m):
    row = matrix[i * n:(i + 1) * n]
```

```
print(*row)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
1 2 3
7 8 9
```

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
23 34 54
56 64 89
```

Compilation Status: Passed

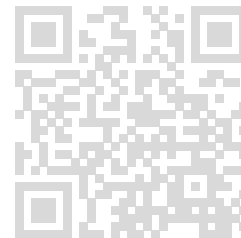
Execution Time:

0.011s

68. Problem Statement:Ramesh is a student and wants to find out if there is any other student in his class who has got the same marks as his, in maths. Help him to find out.

Input Description:First line contains the number of students in the class followed by Ramesh's mark. Second line contains the marks of all students in the class.

Output Description:Index of student who got mark same as Ramesh's mark. If no



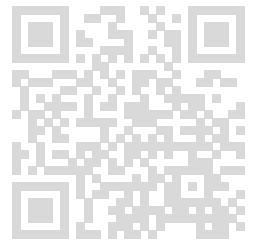
Mohammed (sinwanmohammed022@gmail.com)

such mark exists, return -1.

Sample Input:2 101 2

Sample Output:-1

Explanation:There is no other student who has got any marks same as Ramesh's mark which is 10.



Input Description:

First line contains the number of students in the class followed by Ramesh's mark.
Second line contains the marks of all students in the class.

Output Description:

Index of student who got mark same as Ramesh's mark. If no such mark exists, return -1.

Completion Status: Completed

Concepts Included:

searching

array

Language Used: PYTHON 3

Source Code:

```
# Input
n, r = map(int, input().split())
marks = list(map(int, input().split()))

# Find the index of the first match
if r in marks:
    print(marks.index(r))
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

69. Problem Statement:Shreya is a brilliant girl. She likes to memorize the numbers. These numbers will be shown to her. As an examiner develop an algorithm to test her memory.

CONSTRAINTS $1 \leq Y, N, T \leq 1000$

Input Description:First line contains no. of test cases(Y). Next line contains a number N. Next line contains n space separated numbersNext line contains a number T denoting the number of questions asked from you regarding the given array.Next line contains T space separated numbers.

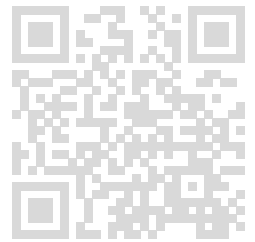
Output Description:Print the occurrence of each number if present else "NOT PRESENT"

Explanation:EXPLANATION: 1 IS REPEATED 3 TIMES,2 also 3 TIMESAnd 3 has occurred single time 0 and 5 are not present

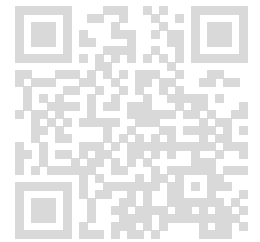
Sample Input:101 1 1 2 2 2 3 8 9 751 2 3 0 5

Sample Output:3 3 1 Not Present Not Present

Input Description:



First line contains no. of test cases(Y). Next line contains a number N. Next line contains n space separated numbers
Next line contains a number T denoting the number of questions asked from you regarding the given array.
Next line contains T space separated numbers.



Output Description:

Print the occurrence of each number if present else "NOT PRESENT"

Completion Status: Completed

Concepts Included:

array

linkedlist

sorting

mathematics

Language Used: PYTHON 3

Source Code:

```
from collections import Counter
```

```
# Read number of shown values and the values themselves
```

```
y = int(input())
```

```
arr = list(map(int, input().split()))
```

```
# Count frequencies
```

```
freq = Counter(arr)
```

```
# Read number of test queries and the queries themselves
```

```
t = int(input())
```

```
queries = list(map(int, input().split()))
```

```
# Prepare output list
```

```
result = []
```

```
for q in queries:
```

```
result.append(str(freq[q]) if q in freq else "Not Present")
```

```
# Print the result joined by space (no trailing space)
```

```
print(" ".join(result))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3 3 1 Not Present Not Present

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 Not Present Not Present 1 1

Compilation Status: Passed

Execution Time:

0.011s

70. Problem Statement: Ria is a 5 year old girl. Her mother wants to teach her how to sort words in the same order that they appear in a dictionary. She decides to write a program to sort a given set of strings based on their alphabetical order. Help Ria's mother to complete the program.

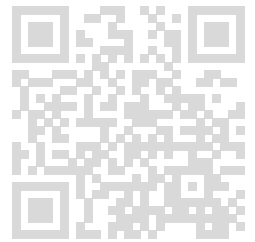
Input Description: A set of N strings

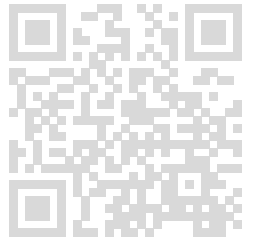
Output Description: Alphabetically sorted set of strings

Sample Input: 3InfinityWar EndGame Avengers

Sample Output: Avengers EndGame InfinityWar

Explanation: The strings are sorted in alphabetical order.



**Input Description:**

A set of N strings

Output Description:

Alphabetically sorted set of strings

Completion Status: Completed

Concepts Included:

sorting

array

strings

Language Used: PYTHON 3

Source Code:

```
# Read input
n = int(input())
words = input().split()
```

```
# Sort alphabetically
words.sort()
```

```
# Print the result
print(" ".join(words))
```

Compilation Details:**TestCase1:****Input:**

< hidden >

Expected Output:

< hidden >

Output:

guvi online training

Compilation Status: Passed

Execution Time:

0.01s

Mohammed (sinwanmohammed022@gmail.com)

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

jc sboa

Compilation Status: Passed

Execution Time:

0.01s

71. Problem Statement:You are given with an array of numbers, Your task is to print the difference of indices of largest and smallest number.All number are unique.

Input Description:First line contains a number 'n'. Then next line contains n space separated numbers.

Output Description:Print the difference of indices of largest and smallest array

Explanation:2-4=-2

Sample Input:51 6 4 0 3

Sample Output:-2

Input Description:

First line contains a number 'n'. Then next line contains n space separated numbers.

Output Description:

Print the difference of indices of largest and smallest array

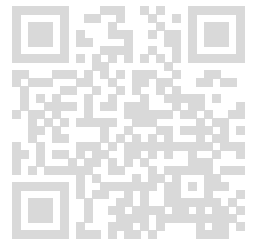
Completion Status: Completed

Concepts Included:

array

numbers

Language Used: PYTHON 3



Source Code:

```
n = int(input())
arr = list(map(int, input().split()))

# Get indices of min and max elements
min_index = arr.index(min(arr))
max_index = arr.index(max(arr))

# Print the difference
print(max_index - min_index)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-2

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

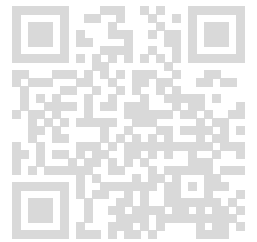
Output:

5

Compilation Status: Passed

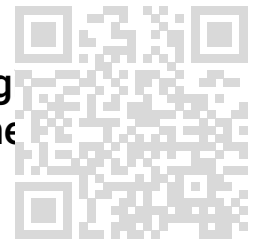
Execution Time:

0.011s



Mohammed (sinwanmohammed022@gmail.com)

72. Problem Statement:You are given a number with duplicate digits, your task is to remove the immediate duplicate digits and print the result



Input Description:You are given a long string of digits

Output Description:Print the desired result print -1 if result length is 0

Explanation:1331 first 33 will be deleted left is 11 and they are again same hence they will also be deleted

Sample Input:1331

Sample Output:11

Input Description:

You are given a long string of digits

Output Description:

Print the desired result print -1 if result length is 0

Completion Status: Completed

Concepts Included:

strings

array

splay trees

Language Used: PYTHON 3

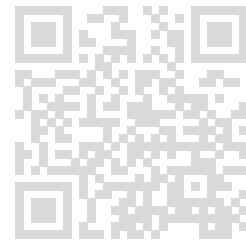
Source Code:

```
s = input().strip()
result = []
i = 0
n = len(s)

while i < n:
    # If the current and next character are the same skip both
    if i + 1 < n and s[i] == s[i + 1]:
        i += 2 # Skip the duplicate pair
    else:
        result.append(s[i])
        i += 1

if result:
    print("".join(result))
```

```
else:  
print("-1")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

11

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

156987

Compilation Status: Passed

Execution Time:

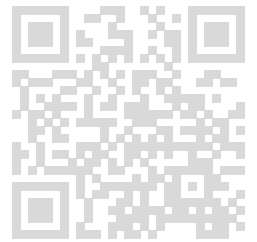
0.009s

73. Question:Given a string S, print it after changing the middle element to * (if the length of the string is even, change the 2 middle elements to *).

Sample Input:hello

Sample Output:he*lo

Completion Status: Completed



Concepts Included:

array

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
n = len(s)

if n % 2 == 1:
    # Odd length: replace middle character with '*'
    mid = n // 2
    result = s[:mid] + '*' + s[mid+1:]
else:
    # Even length: replace 2 middle characters with '**'
    mid = n // 2
    result = s[:mid-1] + '**' + s[mid+1:]

print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

*

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

sa**ad

Compilation Status: Passed

Execution Time:

0.009s

74. Problem Statement: You are provided with an array in which all elements are repeated thrice except one which is repeated twice. Your task is to print that number. $O(n)$ time and $O(1)$ extra space

Input Description: First line contains a number denoting size of array 'n'. Next line contains n space separated numbers

Output Description: Print the number which is repeated twice

Sample Input: 5 13 12 13 12 13

Sample Output: 12

Explanation: 13 repeated thrice 12 repeated twice so the solution is 12

Input Description:

First line contains a number denoting size of array 'n'. Next line contains n space separated numbers

Output Description:

Print the number which is repeated twice

Completion Status: Completed

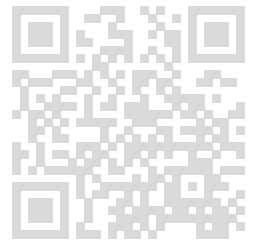
Concepts Included:

array

hashing

Language Used: PYTHON 3

Source Code:



```
n = int(input())
arr = list(map(int, input().split()))
```

```
result = 0
```

```
# Go through each bit position (assuming 32-bit integer)
for i in range(32):
    bit_count = 0
    for num in arr:
        if (num >> i) & 1:
            bit_count += 1
    if bit_count % 3 == 2:
        result |= (1 << i)
```

```
# Handle negative numbers (two's complement for 32-bit)
if result >= 2**31:
    result -= 2**32
```

```
print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

56

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

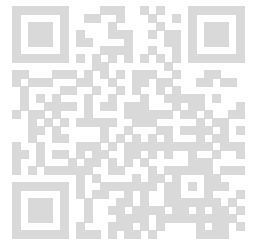
< hidden >

Expected Output:

< hidden >

Output:

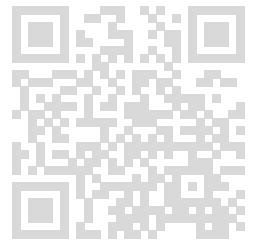
2



Compilation Status: Passed

Execution Time:

0.01s



75. Problem Statement: Given a number N, print 'yes' if it is composite else print 'no'.

Sample Input: 123

Sample Output: yes

Completion Status: Completed

Concepts Included:

mathematics

basics

Language Used: PYTHON 3

Source Code:

```
def is_composite(n):  
    if n <= 1:  
        return False  
    for i in range(2, int(n**0.5)+1):  
        if n % i == 0:  
            return True  
    return False  
  
# Input  
n = int(input())  
  
# Output  
print("yes" if is_composite(n) else "no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed**Execution Time:**

0.01s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed**Execution Time:**

0.01s

76. Problem Statement:Given 2 numbers N and K followed by elements of N .Print 'yes' if K exists else print 'no'.

Input Description:The input consists of two integers, N and K, followed by N integers.

Output Description:The output is 'yes' if K is found among the N integers, otherwise 'no'.

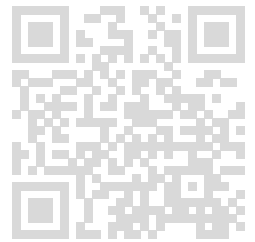
Sample Input:4 21 2 3 3

Sample Output:yes

Completion Status: Completed**Concepts Included:**

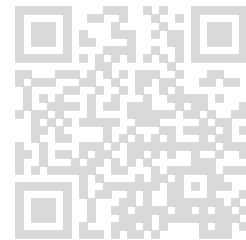
basics

array

Language Used: PYTHON 3**Source Code:**

```
# Input
n, k = map(int, input().split())
arr = list(map(int, input().split()))
```

```
# Check presence
print("yes" if k in arr else "no")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

77. Problem Statement: Kabali is a brave warrior who with his group of young ninjas moves from one place to another to fight against his opponents. Before Fighting he just calculates one thing, the difference between his ninja number and the opponent's ninja

number. From this difference he decides whether to fight or not.
Kabali's ninja number is never greater than his opponent.

Input Description:The input contains two numbers in every line. These two numbers each line denotes the number ninjas in Kabali's clan and his opponent's clan .

Output Description:print the absolute difference of number of ninjas between Kabali's clan and his opponent's clan. Each output should be in seperate line.

Sample Input:100 200

Sample Output:100

Completion Status: Completed

Concepts Included:

mathematics

basics

Language Used: PYTHON 3

Source Code:

```
try:
while True:
# Read input line
line = input().strip()
if not line:
break
a, b = map(int, line.split())
print(abs(b - a))
except EOFError:
pass
```

Compilation Details:

TestCase1:

Input:

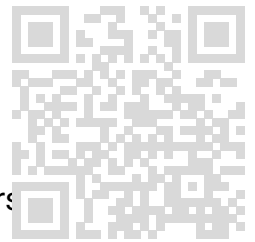
< hidden >

Expected Output:

< hidden >

Output:

90

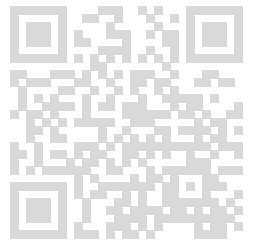


Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.01s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

88

Compilation Status: Passed

Execution Time:

0.009s

78. Problem Statement: Given 2 numbers N and M add both the numbers and check whether the sum is odd or even.

Input Description: The input consists of two integers, N and M.

Output Description: The output is 'odd' if the sum of N and M is odd, and 'even' if the sum is even.

Sample Input: 9 2

Sample Output: odd

Completion Status: Completed

Concepts Included:

basics

mathematics

Language Used: PYTHON 3

Source Code:

```
n, m = map(int, input().split())
total = n + m
```

```
print("even" if total % 2 == 0 else "odd")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

odd

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

even

Compilation Status: Passed

Execution Time:

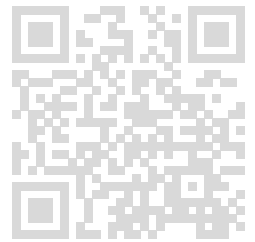
0.01s

79. Problem Statement: Given base(B) and height(H) of a triangle find its area.

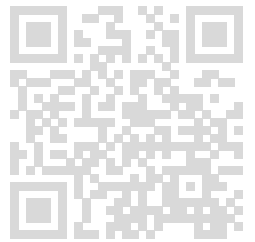
Input Description: The input consists of the base (B) and height (H) of a triangle. The input size N is up to 1000000.

Sample Input: 2 4

Sample Output: 4



Completion Status: Not Completed



Concepts Included:

mathematics

companies

basics

Language Used: PYTHON 3

Source Code:

```
b, h = map(int, input().split())
area = (b * h) // 2 # Use integer division as sample output expects an integer
print(area)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Failed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

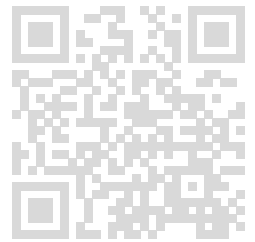
Output:

16

Compilation Status: Passed

Execution Time:

0.01s



80. Problem Statement:Jennyfer is fond of strings. She wants to read the character from right to left (reverse the string), so she wants you to design a suitable algorithm which satisfy her desire.

Input Description:Enter the string 's'

Output Description:Print the string from characters right to left.

Explanation:reverse a given string and print it

Sample Input:jennyfer

Sample Output:Refynnej

Input Description:

Enter the string 's'

Output Description:

Print the string from characters right to left.

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
# Input
s = input().strip()

# Reverse the string
reversed_s = s[::-1]

# Capitalize first letter, make rest lowercase
result = reversed_s.capitalize()

# Output
print(result)
```


Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Refynnej

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Tsrif

Compilation Status: Passed

Execution Time:

0.009s

81. Problem Statement:you are given a string made up of parenthesis only.Your task is to check whether parenthesis are balanced or not.If they are balanced print 1 else print 0

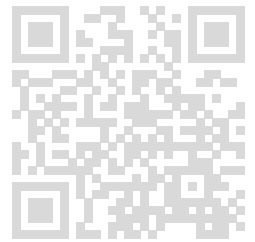
Input Description:You are given a string 's'

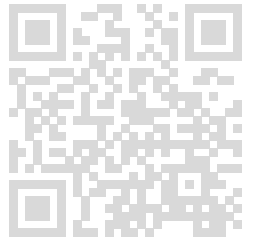
Output Description:Print 1 for balanced and 0 for imbalanced

Sample Input:{{({}})

Sample Output:1

Explanation:check whether the braces are balanced and print 1 or 0





Input Description:

You are given a string 's'

Output Description:

Print 1 for balanced and 0 for imbalanced

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
def is_balanced(s):
    stack = []
    mapping = {'(': '(', ')': ')', '[': '[', ']': ']'}

    for char in s:
        if char in "({[":
            stack.append(char)
        elif char in ")}]":
            if not stack or stack.pop() != mapping[char]:
                return 0

    return 1 if not stack else 0

# Input
s = input().strip()

# Output
print(is_balanced(s))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

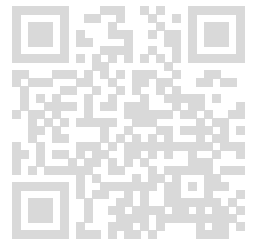
Output:

1

Compilation Status: Passed

Execution Time:

0.01s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

82. Problem Statement:Rahul is given a task to manipulate a string, He hired you as a developer your task is to delete all the repeating characters and print the result left.

Input Description:You are given a string 's'

Output Description:Print the remaining string

Explanation:after first attempt the string left is miiipieStill we have consecutive repeating characters so string after second attempt becomes mpie

Sample Input:mississipie

Sample Output:mpie

Input Description:

You are given a string 's'

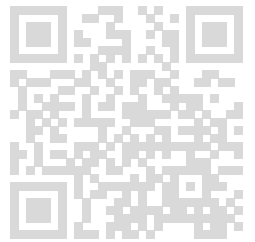
Output Description:

Print the remaining string

Completion Status: Completed

Concepts Included:

strings



Language Used: PYTHON 3

Source Code:

```
from collections import Counter
```

```
# Input
```

```
s = input().strip()
```

```
# Count frequency of each character
```

```
char_count = Counter(s)
```

```
# Keep only characters that appear once
```

```
result = ".join([char for char in s if char_count[char] == 1])
```

```
# Output
```

```
print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

mpe

Compilation Status: Passed

Execution Time:

0.012s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

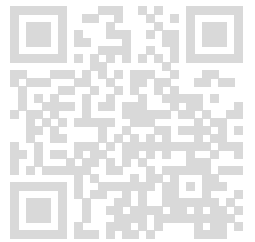
Output:

a

Compilation Status: Passed

Execution Time:

0.013s



83. Problem Statement: Write a program to get a string S, Type of conversion (1 - Convert to Lowercase, 2 - Convert to Uppercase) T, and integer P . Convert the case of the letters in the positions which are multiples of P.(1 based indexing).

Input Description: Given a string S, Type of conversion T, and integer P

Output Description: Convert the case of the letters and print the string

Sample Input: ProFiLe12

Sample Output: Profile

Explanation: the given string ProFiLe is converted to case 1 in the positions of multiples of 2

Input Description:

Given a string S, Type of conversion T, and integer P

Output Description:

Convert the case of the letters and print the string

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

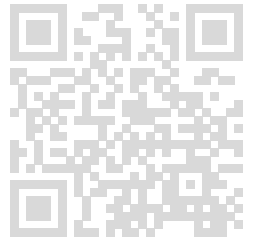
Source Code:

```
# Inputs
S = input().strip()
T = int(input().strip())
P = int(input().strip())
```

```
# Result list
result = []
```

```
for i in range(len(S)):
# 1-based indexing
if (i + 1) % P == 0:
if T == 1:
result.append(S[i].lower())
elif T == 2:
result.append(S[i].upper())
else:
result.append(S[i])

# Output the final string
print("".join(result))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

GuviGeek

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ENVIRONMENT

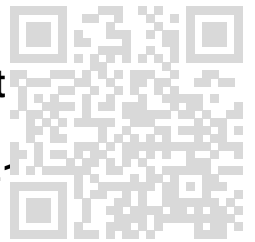
Compilation Status: Passed

Execution Time:

0.01s

Mohammed (sinwanmohammed022@gmail.com)

84. Problem Statement:You are given a string.Your task is to print only the consonants present in the string without affecting the sentence spacings if present. If no consonants are present print -



Input Description:You are given a string 's'.

Output Description:Print only consonants.

Sample Input:I am shrey

Sample Output:m shry

Explanation:remove the vowels and print only the consonants from the string

Input Description:

You are given a string 's'.

Output Description:

Print only consonants.

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input()

vowels = 'aeiouAEIOU'
result = ""

for ch in s:
    if ch == ' ':
        result += ' '
    elif ch.isalpha() and ch not in vowels:
        result += ch

# Check if any consonant was found
if all(c == ' ' for c in result) or result.strip() == "":
    print("-1")
else:
    print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

m shry

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

vrtn

Compilation Status: Passed

Execution Time:

0.01s

85. Question:Given a string S, print 'yes' if it has a vowel in it else print 'no'.

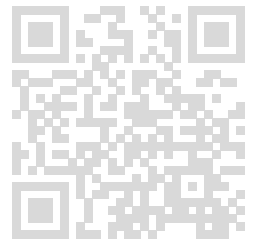
Sample Input:codekata

Sample Output:yes

Completion Status: Completed

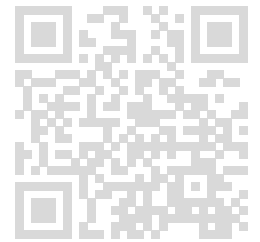
Concepts Included:

strings



Mohammed (sinwanmohammed022@gmail.com)

Language Used: PYTHON 3



Source Code:

```
s = input()

vowels = 'aeiouAEIOU'

if any(char in vowels for char in s):
    print('yes')
else:
    print('no')
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

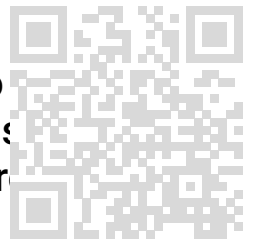
Compilation Status: Passed

Execution Time:

0.009s

Mohammed (sinwanmohammed022@gmail.com)

86. Problem Statement:Joyal was given a sentence. His task is to delete the two words that comes together and print the sentence so that the words in the output sentence have distinct words compared to their adjacent words. If no words are present in the output sentence print -1



Input Description:You are given input string 'S'

Output Description:Print the all the words that are left in the string 's' so that the words in the output sentence have distinct words compared to their adjacent words. Print -1 if no words are left

Explanation:Self Explanatory

Sample Input:I am john cena cena john

Sample Output:I am

Input Description:

You are given input string 'S'

Output Description:

Print the all the words that are left in the string 's' so that the words in the output sentence have distinct words compared to their adjacent words. Print -1 if no words are left

Completion Status: Completed

Concepts Included:

strings

stack

queue

Language Used: PYTHON 3

Source Code:

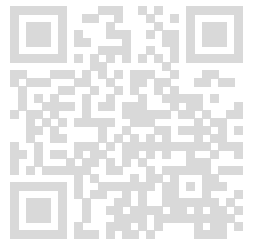
```
s = input().strip()
words = s.split()
```

```
stack = []
```

```
for word in words:
    if stack and stack[-1] == word:
        stack.pop() # remove the previous duplicate word
    else:
```

```
stack.append(word)
```

```
if stack:  
    print(" ".join(stack))  
else:  
    print("-1")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

I am

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

We love we love

Compilation Status: Passed

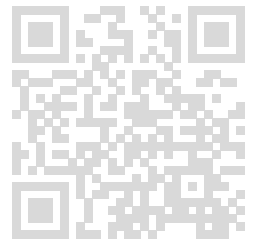
Execution Time:

0.01s

87. Problem Statement: Given a string S, print it without using semicolon in your program.

Sample Input: hello world

Sample Output:hello world



Completion Status: Completed

Concepts Included:

strings

array

Language Used: PYTHON 3

Source Code:

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

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

hello world

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

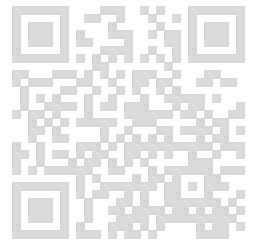
Output:

guvi geeks

Compilation Status: Passed

Execution Time:

0.009s



88. Problem Statement: You are given a paragraph. Your task is to print the words that come just after articles.

Input Description: You are given a string 's'

Output Description: print the words that come just after articles and -1 if there are no articles

Sample Input: The sun rises in the east

Sample Output: sun east

Explanation: sun comes after the article "the" and east comes after the article "the"

Input Description:

You are given a string 's'

Output Description:

print the words that come just after articles and -1 if there are no articles

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

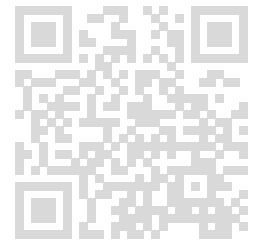
Source Code:

```
s = input().strip()
words = s.split()
articles = {'a', 'an', 'the'}
result = []
```

```
for i in range(len(words) - 1):
    if words[i].lower() in articles:
        result.append(words[i + 1])
```

```
if result:
    print(" ".join(result))
else:
    print("-1")
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

dog

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

best championship

Compilation Status: Passed

Execution Time:

0.009s

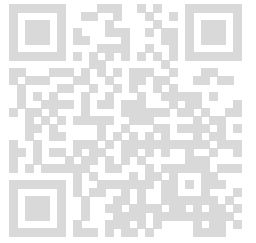
89. Problem Statement: You are given a 'true' string. String is called true if weight of string is multiple of 8. Your task is to tell whether a string can be declared True or Not. Weight of string is the sum of ASCII value of Vowel character(s) present in the string.

Input Description: You are given as string 's' in lower cases

Output Description: Print 1 for true and 0 for false

Explanation: Sum of ASCII values of string is the weight and it should be multiple of 8.

Sample Input: raja



Input Description:

You are given as string 's' in lower cases

Output Description:

Print 1 for true and 0 for false

Completion Status: Completed

Concepts Included:

mathematics

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
vowels = 'aeiou'
weight = sum(ord(ch) for ch in s if ch in vowels)
```

```
if weight % 8 == 0:
    print(1)
else:
    print(0)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

90. Problem Statement: You are given a string 's'. Your task is to print the string in the order they are present and then sum of digits.

Input Description: You are given a string 's'.

Output Description: Print the string and then at last sum of all the digits

Sample Input: AC30BD40

Sample Output: ACBD7

Explanation: Given 4 digits in between 3 and 4, 0, 0 and sum is 7 so output is ACBD7

Input Description:

You are given a string 's'.

Output Description:

Print the string and then at last sum of all the digits

Completion Status: Completed

Concepts Included:

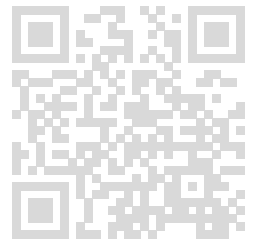
strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
```

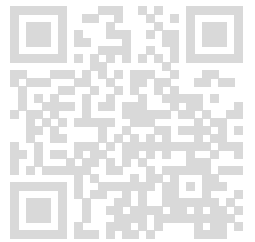
```
letters = "
```




```
digit_sum = 0

for ch in s:
    if ch.isalpha():
        letters += ch
    elif ch.isdigit():
        digit_sum += int(ch)

print(f"{letters}{digit_sum}")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

AJUKH13

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ACBEW5

Compilation Status: Passed

Execution Time:

0.01s

91. Problem Statement: Given a string 'S' print the sum of weight of the String. A weight of character is defined as the ASCII value of

corresponding character.

Input Description:You are given a string 's'

Output Description:Print weight

Explanation:the given string abc has an ascii value total of 294

Sample Input:abc

Sample Output:294

Input Description:

You are given a string 's'

Output Description:

Print weight

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
weight = sum(ord(ch) for ch in s)
print(weight)
```

Compilation Details:

TestCase1:

Input:

< hidden >

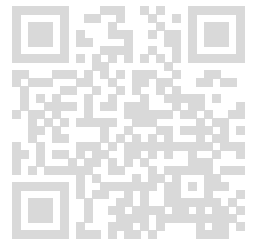
Expected Output:

< hidden >

Output:

294

Compilation Status: Passed



Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

201

Compilation Status: Passed

Execution Time:

0.01s

92. Problem Statement: Given an array of pairs of strings, find if there are mirror pairs. (s1, s2) & (s3, s4) are mirror pairs, if s1 = s4 and s2 = s3. The first string in each pair is distinct.

Input Description: The first line contains the number string pairs N. Then N string pairs follow.

Output Description: Print YES, if a mirror pair exists, print NO otherwise.

Explanation: (raja, kili) and (kili, raja) are mirror pairs

Sample Input: 3
raja kilipan quilkili raja

Sample Output: YES

Input Description:

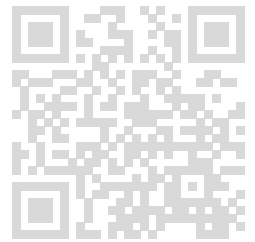
The first line contains the number string pairs N.
Then N string pairs follow.

Output Description:

Print YES, if a mirror pair exists, print NO otherwise.

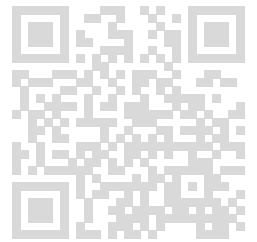
Completion Status: Completed

Concepts Included:



hashing

strings



Language Used: PYTHON 3

Source Code:

```
n = int(input())
pairs = []

found = False

for _ in range(n):
    a, b = input().split()
    # Check if the mirror pair (b, a) already exists
    if (b, a) in pairs:
        found = True
        break
    pairs.append((a, b))

print("YES" if found else "NO")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

NO

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

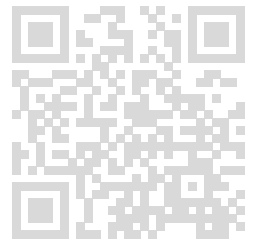
Mohammed (sinwanmohammed022@gmail.com)

Output:

YES

Compilation Status: Passed**Execution Time:**

0.01s



93. Problem Statement:You are given string 's'. Your task is to modify the string as mentioned below:-1)The string should not have three consecutive same characters.2)You can add any number of characters anywhere in the string. Find the minimum number of characters which Ishaan must insert in the string.

Input Description:You are given a string 's'

Output Description:print the required answer in a new line.

Explanation:3 b's occur consecutively, we add a 'd',aabbdbcc

Sample Input:aabbbcc

Sample Output:1

Input Description:

You are given a string 's'

Output Description:

print the required answer in a new line.

Completion Status: Completed**Concepts Included:**

strings

Language Used: PYTHON 3**Source Code:**

```
s = input().strip()
insertions = 0
i = 0
n = len(s)
```

```
while i < n:
```

```
count = 1
while i + 1 < n and s[i] == s[i + 1]:
    count += 1
    i += 1
insertions += count // 3
i += 1
```

```
print(insertions)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

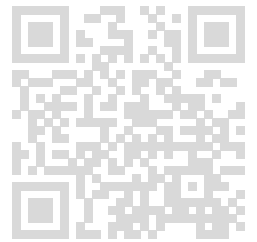
1

Compilation Status: Passed

Execution Time:

0.009s

94. Problem Statement: You are given with a string which comprises of some numbers. Your task is to find the largest integer by converting the string to the corresponding integer.



Mohammed (sinwanmohammed022@gmail.com)

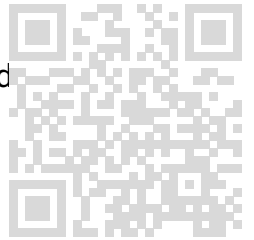
Input Description:First line contains n denoting number of Test Cases. The first and only Line of testcase has the string

Output Description:Print the largest number

Sample Input:I was born on 12 october 1998.

Sample Output:1998

Explanation:Integers present 12 and 1998 $1998 > 12$



Input Description:

First line contains n denoting number of Test Cases. The first and only Line of testcase has the string

Output Description:

Print the largest number

Completion Status: Completed

Concepts Included:

mathematics

strings

integer

Language Used: PYTHON 3

Source Code:

```
import re
```

```
s = input().strip()
```

```
# Find all sequences of digits
numbers = re.findall(r'\d+', s)
```

```
if numbers:
    int_numbers = list(map(int, numbers))
    print(max(int_numbers))
else:
    print("-1") # If no number is found
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1947

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

28

Compilation Status: Passed

Execution Time:

0.015s

95. Problem Statement:You are given a string 's'. Your task is to tell whether string is beautiful or not.A beautiful string is a string in which String starts with 'a' or 'A' and middle element is either 'm' or 'M' and last element is 'z'or 'Z'

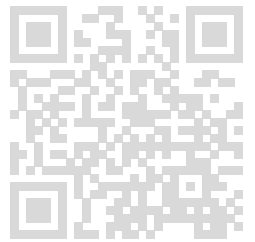
Input Description:You are given a string 's'.

Output Description:Print 1 if string is beautiful and 0 if it is not

Explanation:Amz is beautiful string as the starting letter is A, middle letter is m and last letter is z

Sample Input:Amz

Sample Output:1



Input Description:

You are given a string 's'.

Output Description:

Print 1 if string is beautiful and 0 if it is not

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()

# Length must be odd to have a clear middle character
if len(s) >= 3 and s[0].lower() == 'a' and s[-1].lower() == 'z' and s[len(s)//2].lower() == 'm':
    print(1)
else:
    print(0)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

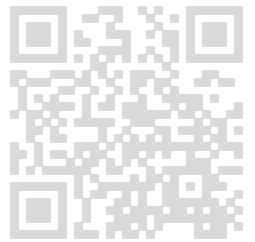
Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:



< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

96. Problem Statement: Given a string S, print 'yes' if it is a palindrome or 'no' if it is not a palindrome.

Sample Input: lappal

Sample Output: yes

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
```

```
if s == s[::-1]:  
    print("yes")  
else:  
    print("no")
```

Compilation Details:

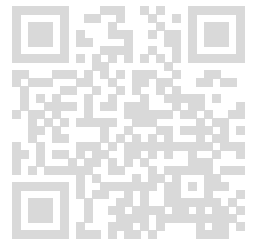
TestCase1:

Input:

< hidden >

Expected Output:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

Output:

yes

Compilation Status: Passed**Execution Time:**

0.01s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed**Execution Time:**

0.01s

97. Problem Statement:You are given a string 'S' consisting of lowercase Latin Letters. Find the first non repeating character in S. If you find all the characters are repeating print the answer as -1

Input Description:You are given a string 's'

Output Description:Print the first non occurring character if possible else -1.

Explanation:Find the first non repeating character in the given string .Print the first non occurring character if possible else print -1.

Sample Input:apple

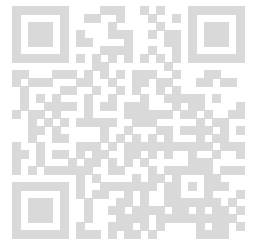
Sample Output:a

Input Description:

You are given a string 's'

Output Description:

Print the first non occurring character if possible else -1.



Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()

freq = {}

# Count frequency of each character
for ch in s:
    freq[ch] = freq.get(ch, 0) + 1

# Find the first non-repeating character
found = False
for ch in s:
    if freq[ch] == 1:
        print(ch)
        found = True
        break

if not found:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

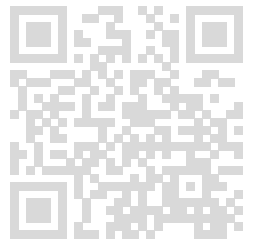
e

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

r

Compilation Status: Passed

Execution Time:

0.01s

98. Problem Statement: You are given some words all in lower case letters your task is to print them in sorted order.

Input Description: You are given a string 's'

Output Description: Print the string in sorted order

Sample Input: virat kohli

Sample Output: kohli virat

Explanation: Self Explanatory

Input Description:

You are given a string 's'

Output Description:

Print the string in sorted order

Completion Status: Completed

Concepts Included:

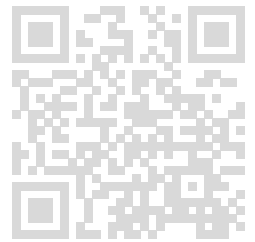
strings

Language Used: PYTHON 3

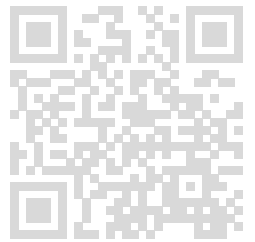
Source Code:

```
s = input().strip()
```

```
# Split, sort, and join the words
```



```
sorted_words = sorted(s.split())
print(' '.join(sorted_words))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

kohli virat

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

cricket love we

Compilation Status: Passed

Execution Time:

0.01s

99. Problem Statement:Guvi developed a new system to make sure no two usernames are same. So, they hired you as a developer to develop this system. They have set some rules to do the same.If you see the same username that already exists, just add a number at the end of that username ,else print "Verified".

Input Description:First line consists of an integer N, denoting number of usernames. Second line consists of N spaced separated Strings, denoting usernames.

Output Description: print the required output in a new line.

Explanation: If the string is getting print for the first time then the output for it is Verified else if the string is repeating the then the output is print as string1,string2, and so on.

Sample Input: 4abc aab abc aba

Sample Output: Verified Verified abc1 aba

Input Description:

First line consists of an integer N, denoting number of usernames. Second line consists of N spaced separated Strings, denoting usernames.

Output Description:

print the required output in a new line.

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
n = int(input())
usernames = input().split()

seen = {}
result = []

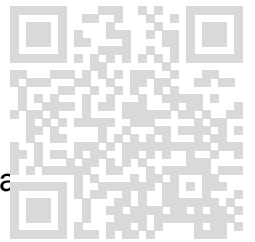
for name in usernames:
    if name not in seen:
        seen[name] = 1
        result.append("Verified")
    else:
        result.append(f"{name}{seen[name]}")
        seen[name] += 1

print(' '.join(result))
```

Compilation Details:

TestCase1:

Input:



< hidden >

Expected Output:

< hidden >

Output:

Verified Verified abc1 Verified

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Verified Verified abc1 Verified

Compilation Status: Passed

Execution Time:

0.01s

100. Problem Statement: You are given two strings . Your task is to tell whether the pair of strings is panagram. A pair of strings are said to be panagram if they both are palindrome and are anagram of each other.

Input Description: You will be given two strings 's1' and 's2'

Output Description: Print 1 if they are panagram and 0 if they are not

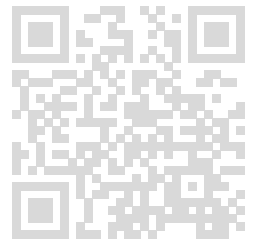
Sample Input: nitin intni

Sample Output: 1

Explanation: Considering the given sample input nitin intni it is both palindrome and anagram of each other. so 1 is printed.

Input Description:

You will be given two strings 's1' and 's2'



Output Description:

Print 1 if they are panagram and 0 if they are not

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
def is_palindrome(s):  
    return s == s[::-1]  
  
def is_anagram(s1, s2):  
    return sorted(s1) == sorted(s2)  
  
s1, s2 = input().split()  
  
if is_palindrome(s1) and is_palindrome(s2) and is_anagram(s1, s2):  
    print(1)  
else:  
    print(0)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

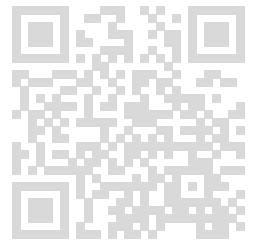
Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:



< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.009s

101. Problem Statement: You are given a string 's'. Your task is to find whether string is beautiful or not. A string is said to be beautiful whenever string is made up of only three characters. All the three characters must be distinct. Print true if string is beautiful and false when it is not beautiful

Input Description: You are given a string

Output Description: Print '1' when string is beautiful and '0' when it is not

Explanation: In the sample the A a b are different characters with different ASCII character value. Therefore the output is 1.

Sample Input: Aab

Sample Output: 1

Input Description:

You are given a string

Output Description:

Print '1' when string is beautiful and '0' when it is not

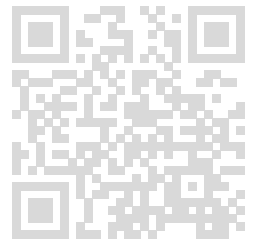
Completion Status: Completed

Concepts Included:

strings

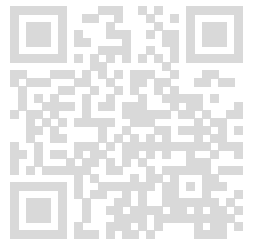
Language Used: PYTHON 3

Source Code:



```
s = input().strip()
```

```
# Check if length is 3 and all characters are unique
if len(s) == 3 and len(set(s)) == 3:
    print(1)
else:
    print(0)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

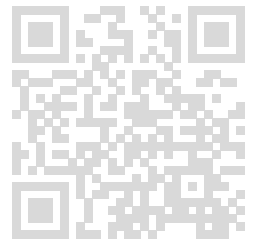
Execution Time:

0.01s

102. Problem Statement: Given a string S, find its length(including the spaces) without using any pre-defined functions.

Sample Input: codekata

Sample Output:8



Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input()
count = 0
for _ in s:
    count += 1
print(count)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

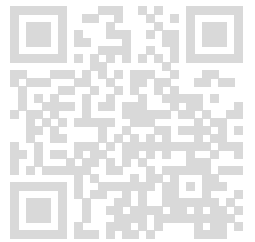
< hidden >

Output:

Compilation Status: Passed

Execution Time:

0.01s



103. Problem Statement: In a school there are voting to choose the monitor of class. Your task is to tell which candidate is winner and if there is a tie print the name of candidate whose come first in lexicographical order.

Input Description: You are given with the space separated names.

Output Description: Print the winner's name and the votes he earned.

Explanation: With respect to the given example input john is occurring 4 times and lexicographically john comes first in the given list so he is the winner.

Sample Input: john johnny jackie johnny john jackie jamie jamie john johnny jamie johnny john

Sample Output: john 4

Input Description:

You are given with the space separated names.

Output Description:

Print the winner's name and the votes he earned.

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
names = input().split()
```

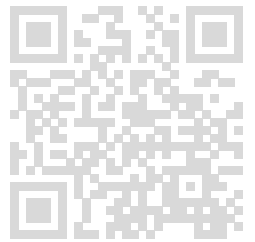
```
# Dictionary to store vote counts
```

```
votes = {}
```

```
for name in names:
```

```
votes[name] = votes.get(name, 0) + 1
```

```
# Find winner: max by (votes, lexicographical order)
winner = min(
[name for name, count in votes.items() if count == max(votes.values())]
)
print(winner, votes[winner])
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

john 4

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

andy 1

Compilation Status: Passed

Execution Time:

0.01s

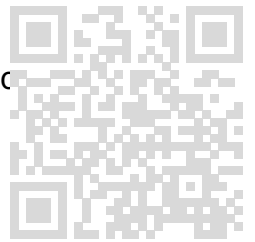
104. Problem Statement: Given a sentence and string S, find how many times S occurs in the given sentence. If S is not found in the sentence print -1

Input Description: Input Size : |sentence| ≤ 1000000 (complexity O(n)).

Output Description:The output is the number of times S occurs in the given sentence or -1 if S is not found.

Sample Input:I enjoy doing codekatacodekata

Sample Output:1



Completion Status: Completed

Concepts Included:

strings

array

Language Used: PYTHON 3

Source Code:

```
sentence = input().strip()
word = input().strip()

count = sentence.split().count(word)

if count == 0:
    print(-1)
else:
    print(count)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

105. Problem Statement: Given a string S, print 2 strings such that first string containing all characters in odd position(s) and other containing all characters in even position(s).

Sample Input: XCODE

Sample Output: XOE CD

Completion Status: Completed

Concepts Included:

strings

array

Language Used: PYTHON 3

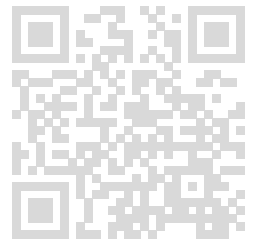
Source Code:

```
s = input().strip()
odd_chars = ""
even_chars = ""

for i in range(len(s)):
    if i % 2 == 0: # Index starts from 0 → odd position (1st, 3rd, 5th...)
        odd_chars += s[i]
    else:
        even_chars += s[i]

print(odd_chars, even_chars)
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Snya undy

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

246 35

Compilation Status: Passed

Execution Time:

0.009s

106. Problem Statement: You are given a string 's'. Print all the duplicate characters of string.

Input Description: String 's' is given

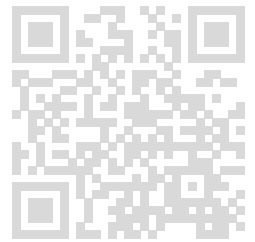
Output Description: Print only duplicate character and -1 if no character is duplicate.

Explanation: In the sample input d and e are duplicate so the output is d e.

Sample Input: abcddee

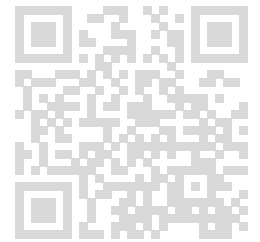
Sample Output: d e

Input Description:



Mohammed (sinwanmohammed022@gmail.com)

String 's; is given



Output Description:

Print only duplicate character and -1 if no character is duplicate.

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
duplicates = []

for char in set(s):
    if s.count(char) > 1:
        duplicates.append(char)

if duplicates:
    print(" ".join(sorted(duplicates, key=s.index)))
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

d

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

107. Problem Statement: Indian PAN card issuing authority have found some fake PAN cards. They have hired you so that you can validate PAN card for them. Your task is to develop a suitable algorithm which could check if pan is valid or not

- 1) Pan must have uppercase letters only.
- 2) It must be of 10 character only
- 3) From index 1 to 5 all must be letters(A-Z), last index must be letter
- 4) Rest all must be integer Starting from 1

Input Description: You are given a input string which indicates the PAN number

Output Description: Print 'pan' if it is valid PAN number, else print 'not pan'

Explanation: All the above mentioned criteria must be satisfied

Sample Input: HXTPS2142R

Sample Output: pan

Input Description:

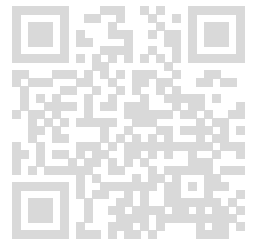
You are given a input string which indicates the PAN number

Output Description:

Print 'pan' if it is valid PAN number, else print 'not pan'

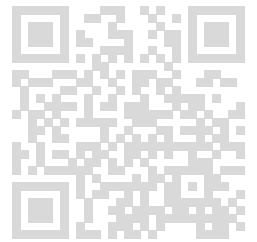
Completion Status: Completed

Concepts Included:



strings

Language Used: PYTHON 3



Source Code:

```
pan = input().strip()

if (
    len(pan) == 10 and
    pan.isupper() and
    pan[:5].isalpha() and
    pan[-1].isalpha() and
    pan[5:-1].isdigit() and
    pan[5] != '0' # First digit can't be 0, starts from 1
):
    print("pan")
else:
    print("not pan")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

pan

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

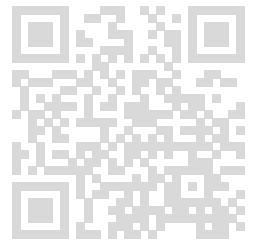
Output:

not pan

Compilation Status: Passed

Execution Time:

0.01s



108. Problem Statement: You are given a string 's'. Your task is to print the string in alternate lowercase and uppercase order.

Input Description: You are given a string

Output Description: Print the string according to given criteria

Explanation: First word is to be converted to uppercase Second to lower and then Third to uppercase

Sample Input: abcd efgh ijkl

Sample Output: ABCD efgh IJKL

Input Description:

You are given a string

Output Description:

Print the string according to given criteria

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

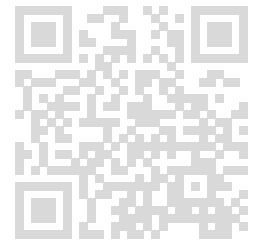
Source Code:

```
s = input().split()
result = []

for i, word in enumerate(s):
    if i % 2 == 0: # even index word → uppercase
        result.append(word.upper())
    else:         # odd index word → lowercase
        result.append(word.lower())

print(" ".join(result))
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ABCD efgh IJKL

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

WE love DATA structures AND algorithm

Compilation Status: Passed

Execution Time:

0.009s

109. Problem Statement:Given a day, print 'yes' if it is a holiday otherwise print'no'.Assume that weekend days are holidays

Sample Input:saturdaymonday

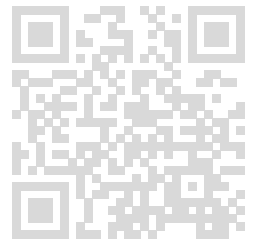
Sample Output:yesno

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3



Source Code:

```
day = input().strip().lower() # normalize to lowercase
if day in ["saturday", "sunday"]:
    print("yes")
else:
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

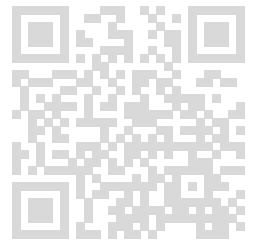
Compilation Status: Passed

Execution Time:

0.01s

Mohammed (sinwanmohammed022@gmail.com)

110. Problem Statement:You are given a string 's'. Your task is to print the characters which are not repeated with a single space in between the characters.



Input Description:You are given a string 's'.

Output Description:Print the characters present once and -1 if there is no character which satisfy above condition

Explanation:Verifying weather is string is repeated or not.

Sample Input:dabbc

Sample Output:d a c

Input Description:

You are given a string 's'.

Output Description:

Print the characters present once and -1 if there is no character which satisfy above condition

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
result = []

for ch in s:
    if s.count(ch) == 1:
        result.append(ch)

if result:
    print(" ".join(result))
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

d a b

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

a c

Compilation Status: Passed

Execution Time:

0.01s

111. Problem Statement: Given 2 strings S1 and s2, check whether they are case sensitively equal without using any predefined function(case sensitive). If they are not same print 'no'

Sample Input: guvi guvi

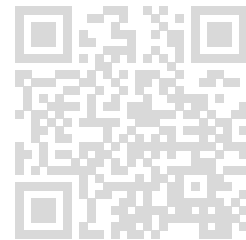
Sample Output: yes

Completion Status: Completed

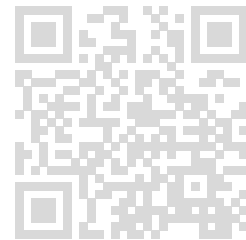
Concepts Included:

strings

array



Language Used: PYTHON 3



Source Code:

```
s1, s2 = input().split()

# First check if lengths match
if len(s1) != len(s2):
    print("no")
else:
    same = True
    for i in range(len(s1)):
        if s1[i] != s2[i]: # manual character-by-character comparison
            same = False
            break
    if same:
        print("yes")
    else:
        print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

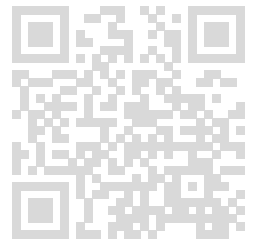
Output:

yes

Compilation Status: Passed

Execution Time:

0.01s



112. Problem Statement: Given a string S, print the encoded string by adding 3 to each character (a maps to d, b maps to e, c maps to f and so on).

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: RADAR

Sample Output: UDGDU

Completion Status: Completed

Concepts Included:

strings

array

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
encoded = ""

for ch in s:
    # For uppercase letters
    if 'A' <= ch <= 'Z':
        encoded += chr((ord(ch) - ord('A') + 3) % 26 + ord('A'))
    # For lowercase letters (if they appear)
    elif 'a' <= ch <= 'z':
        encoded += chr((ord(ch) - ord('a') + 3) % 26 + ord('a'))
    else:
        encoded += ch # Non-alphabet characters remain unchanged

print(encoded)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ARUR

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

MLPPLH

Compilation Status: Passed

Execution Time:

0.011s

113. Problem Statement:You are given two arrays of equal length. Your task is to merge the two arrays then sort them too and then find the sum of two middlemost elements.

Input Description:You are given a number 'n'. Then Next line contains first list of 'n' separated numbers.Third line contains second list of 'n' space separated numbers.

Output Description:Print the sum of two middle elements

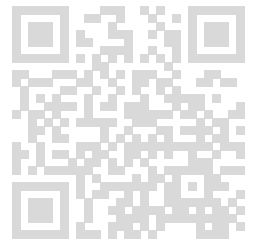
Sample Input:51 9 16 25 462 3 4 5 6

Sample Output:11

Explanation:Self Explanatory

Input Description:

You are given a number 'n'. Then Next line contains first list of 'n' separated numbers.Third line contains second list of 'n' space separated numbers.



Output Description:

Print the sum of two middle elements

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
n = int(input().strip())
arr1 = list(map(int, input().split()))
arr2 = list(map(int, input().split()))

# Merge the two arrays
merged = arr1 + arr2

# Sort the merged array
merged.sort()

# Find the two middlemost elements
length = len(merged) # = 2*n
mid1 = merged[length // 2 - 1]
mid2 = merged[length // 2]

# Print their sum
print(mid1 + mid2)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

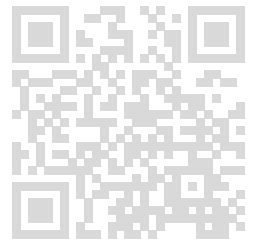
Output:

11

Compilation Status: Passed

Execution Time:

0.01s



Mohammed (sinwanmohammed022@gmail.com)

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

114. Problem Statement: Find the first 0 in window of size k. You are given n numbers and window size 'w'. Your task is to print the first index which has 0

Input Description: You are given two numbers 'n' and 'w' n representing size of array and 'w' size of window

Output Description: Print the index of first 0(1 based indexing), if there is no index with 0 print -1

Sample Input: 7 21 0 6 7 4 0 9

Sample Output: 2 2 -1 -1 6 6

Explanation: Self Explanatory

Input Description:

You are given two numbers 'n' and 'w' n representing size of array and 'w' size of window

Output Description:

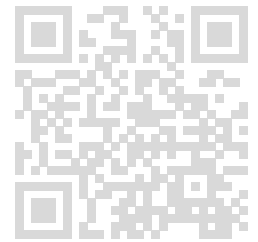
Print the index of first 0(1 based indexing), if there is no index with 0 print -1

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3



Source Code:

```
n, w = map(int, input().split())
arr = list(map(int, input().split()))

result = []
for i in range(n - w + 1): # slide window from 0 to n-w
    found = False
    for j in range(i, i + w): # check elements inside window
        if arr[j] == 0:
            result.append(j + 1) # +1 for 1-based index
            found = True
            break
    if not found:
        result.append(-1)

print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 2 -1 -1 6 6

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

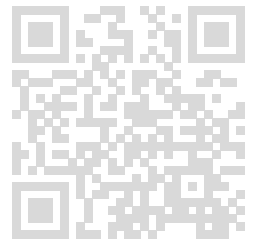
Expected Output:

< hidden >

Output:

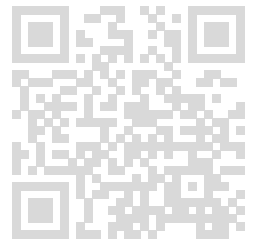
1 2 3 4 5 6 7 8

Compilation Status: Passed



Execution Time:

0.011s



115. Problem Statement: Pk finds it difficult to judge the minimum element in the list of elements given to him. Your task is to develop the algorithm in order to find the minimum element. **Note:** Don't use sorting

Input Description: You are given 'n' number of elements. Next line contains n space separated numbers.

Output Description: Print the minimum element

Explanation: Self Explanatory

Sample Input: 53 4 9 1 6

Sample Output: 1

Input Description:

You are given 'n' number of elements. Next line contains n space separated numbers.

Output Description:

Print the minimum element

Completion Status: Completed

Concepts Included:

mathematics

array

Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))

minimum = arr[0] # assume first element is minimum
for num in arr[1:]:
    if num < minimum:
        minimum = num

print(minimum)
```


Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.014s

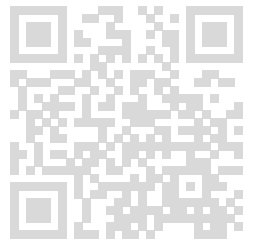
116. Problem Statement:In a world cup tournament, no of goals scored by each team is given to you. Your task is to calculate net goal rate of each team. Net goal rate of team is calculated as $\text{No of goals(team)} - \text{sum of(no of goals by last 3 teams)}$

Input Description: You are given a number 'n'. Next line contains n space separated numbers.

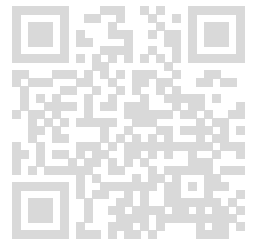
Output Description: Print the net goal rate of each team

Sample Input: 5 95 85 75 12 11

Sample Output: -3 -13 -23 -86 -87



Explanation:Self Explanatory



Input Description:

You are given a number 'n'.Next line contains n space separated numbers.

Output Description:

Print the net goal rate of each team

Completion Status: Completed

Concepts Included:

array

mathematics

Language Used: PYTHON 3

Source Code:

```
n = int(input())
goals = list(map(int, input().split()))

last3_sum = sum(goals[-3:]) # sum of last 3 teams
result = [str(g - last3_sum) for g in goals]
print(" ".join(result))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-3 -13 -23 -86 -87

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

13 -2 -17 -22 -74 -78

Compilation Status: Passed

Execution Time:

0.01s

117. Problem Statement: Loki wants to steal the tesseract but in order to do so, he has to rearrange the elements in an array in a specific manner which is mentioned in a clue. The clue says 'cursed are the odd and sorted are the even'. Loki manages to decode the clue which translates to "sort the even positioned elements of an array, starting from the element at index 0, in ascending order". Manipulate the array so as to help Loki steal the tesseract.

Input Description: Size of the array followed by the elements of the array

Output Description: Even index array elements sorted in ascending order

Sample Input: 5 3 9 1 44 6

Sample Output: 1 9 3 44 6

Explanation: The elements 3,1,6 are sorted in ascending order

Input Description:

Size of the array followed by the elements of the array

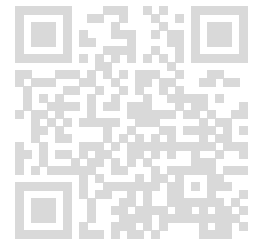
Output Description:

Even index array elements sorted in ascending order

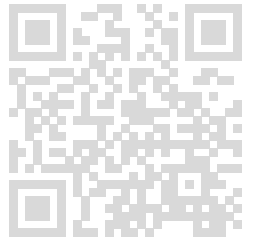
Completion Status: Completed

Concepts Included:

sorting



array



Language Used: PYTHON 3

Source Code:

```
# Input
n = int(input())
arr = list(map(int, input().split()))

# Extract even indexed elements
even_elements = [arr[i] for i in range(0, n, 2)]

# Sort them
even_elements.sort()

# Place back into array
j = 0
for i in range(0, n, 2):
    arr[i] = even_elements[j]
    j += 1

# Output
print(*arr)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 6 3 4 5 2 7

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

23 9 39 5 45 47

Compilation Status: Passed

Execution Time:

0.011s

118. Problem Statement: You are an intern at GUVI and the company wants to organise its data and delete unnecessary extra storage elements used. You are given k arrays of unequal dimensions. Sort the k arrays individually and concatenate them.

Input Description: First line contains the number of arrays. Subsequent lines contain the size of the array followed by the elements of the array.

Output Description: An array containing the sorted elements of k sorted arrays

Explanation: The elements in all the arrays are first sorted in ascending order and then the arrays are concatenated.

Sample Input: 3 2 9 8 12 6 1 2 3 8 5 9 11 1

Sample Output: 12 9 8 1 2 3 5 8 9 11

Input Description:

First line contains the number of arrays.

Subsequent lines contain the size of the array followed by the elements of the array.

Output Description:

An array containing the sorted elements of k sorted arrays

Completion Status: Completed

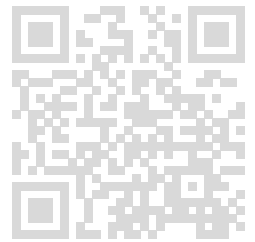
Concepts Included:

sorting

array

Language Used: PYTHON 3

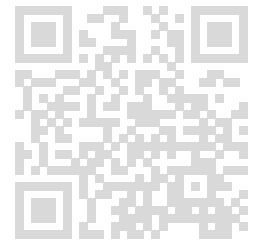
Source Code:



```
# Input
k = int(input())
result = []

for _ in range(k):
    size = int(input())      # read size
    arr = list(map(int, input().split())) # read elements
    arr.sort()               # sort array individually
    result.extend(arr)       # concatenate to result

# Output
print(*result)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 3 10 12 43 66 76

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 45 67 9 12 56

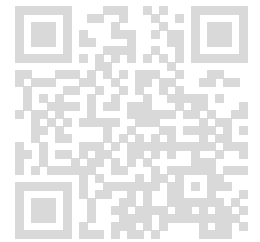
Compilation Status: Passed

Execution Time:

0.01s

Mohammed (sinwanmohammed022@gmail.com)

119. Problem Statement: You are a software engineer at an MNC. You are given the task of sorting the employees in your company based on their salary. Perform the task so that the employees, including yourself, will get a bonus from the management.
CONSTRAINT: $0 \leq \text{salary} \leq 1000000$



Input Description: Number of employees followed by their name and salary

Output Description: Sorted list of employee names

Sample Input: 3Karthik 23000 rohan 81734 varshini 12343

Sample Output: varshiniKarthikRohan

Explanation: 12343

Input Description:

Number of employees followed by their name and salary

Output Description:

Sorted list of employee names

Completion Status: Completed

Concepts Included:

sorting

array

Language Used: PYTHON 3

Source Code:

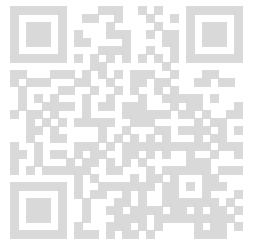
```
# Input
n = int(input())
data = input().split()

# Collect (name, salary) pairs
employees = []
for i in range(0, 2*n, 2):
    name = data[i]
    salary = int(data[i+1])
    employees.append((name, salary))

# Sort based on salary
employees.sort(key=lambda x: x[1])

# Print only names in order (unchanged case)
```

```
for emp in employees:  
    print(emp[0])
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ram
rohit

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

jacob
naveen

Compilation Status: Passed

Execution Time:

0.01s

120. Problem Statement: You are given an array of ids of prisoners. The jail authority found that there are some prisoners of same id. Your task is to help the authority in finding the common ids.

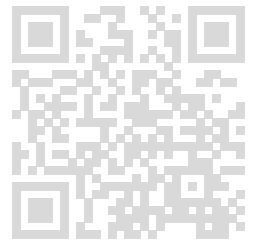
Input Description: First line contains a number 'n' representing no of prisoners. Next line contains n space separated numbers.

Output Description:Print the ids which are not unique. Print -1 if all ids are unique

Sample Input:71 1 11 121 131 141 98

Sample Output:1

Explanation:1 is the repeated element



Input Description:

First line contains a number 'n' representing no of prisoners. Next line contains n space separated numbers.

Output Description:

Print the ids which are not unique. Print -1 if all ids are unique

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
n = int(input().strip())
ids = list(map(int, input().split()))

seen = set()
duplicates = []
for x in ids:
    if x in seen and x not in duplicates:
        duplicates.append(x)
    else:
        seen.add(x)

if duplicates:
    print(" ".join(map(str, duplicates)))
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

46

Compilation Status: Passed

Execution Time:

0.01s

121. Problem Statement:Rahul is fond of numbers.He is given a list of queries. 1 means store that element,2 means means print the minimum element of the stored list. For more clarity see the input and output example

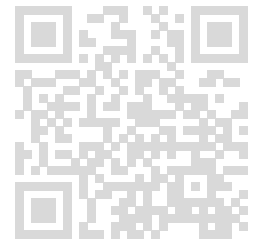
Input Description:The first line of the input N indicates the size of the query list. For N lines, the queries are given with the format of '1 M', where M indicates the number to be stored and 1 indicates the query type. Similarly, '2' which indicates the type of query and it does not contain M since it is not required by this query type. Briefly saying, '1 M' means store that element M in a list '2' means print the minimum element of stored list

Output Description:Print the minimum element and -1 if there are no elements in stored list if the querytype is 2. Store the given number in the list if the query type is 1.

Explanation:Self Explanatory

Sample Input:51 6021 5821 69

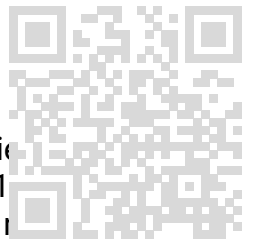
Sample Output:60 58



Input Description:

The first line of the input N indicates the size of the query list. For N lines, the queries are given with the format of '1 M', where M indicates the number to be stored and 1 indicates the query type. Similarly, '2' which indicates the type of query and it does not contain M since it is not required by this query type.

Briefly saying, '1 M' means store that element M in a list
'2' means print the minimum element of stored list



Output Description:

Print the minimum element and -1 if there are no elements in stored list if the querytype is 2. Store the given number in the list if the query type is 1.

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
n = int(input().strip())
arr = []
output = []

for _ in range(n):
    query = input().split()

    if query[0] == '1':
        arr.append(int(query[1]))
    elif query[0] == '2':
        if arr:
            output.append(str(min(arr)))
        else:
            output.append(str(-1))

print(" ".join(output))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

60 58

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1 60

Compilation Status: Passed

Execution Time:

0.01s

122. Problem Statement: You are given given task is to print whether array is 'majestic' or not. A 'majsetic' array is an array whose sum of first three number is equal to last three number.

Input Description: You are given a number 'n', Next line contains 'n' space separated

Output Description: Print 1 if array is majestic and 0 if it is not

Explanation: Self Explanatory

Sample Input: 7 1 2 3 4 6 0 0

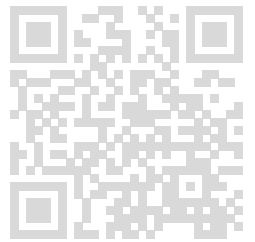
Sample Output: 1

Input Description:

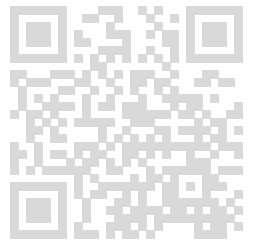
You are given a number 'n', Next line contains 'n' space separated

Output Description:

Print 1 if array is majestic and 0 if it is not



Completion Status: Completed



Concepts Included:

mathematics

array

Amazon

Facebook

United-Health-Group

guvi-learning-path

Language Used: PYTHON 3

Source Code:

```
n = int(input().strip())
arr = list(map(int, input().split()))
```

```
if n < 6:
    print(0)
else:
    if sum(arr[:3]) == sum(arr[-3:]):
        print(1)
    else:
        print(0)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

123. Problem Statement: Given numbers A,B find A^B .

Input Description: Input Size : $1 \leq A \leq 5 \leq B \leq 50$

Sample Input: 3 4

Sample Output: 81

Completion Status: Completed

Concepts Included:

array

mathematics

basics

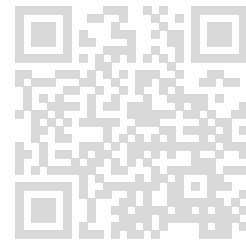
Language Used: PYTHON 3

Source Code:

```
A, B = map(int, input().split())  
print(A ** B)
```

Compilation Details:**TestCase1:****Input:**

< hidden >

Expected Output:

< hidden >

Output:

243

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.015s

124. Problem Statement:Indian politics has an interesting trend in history. A party which assumes that it is the undefeatable champion in elections has been defeated by other parties in many instances.You are a data analyst in the Election Commission. You are given a list containing a year and the party which won the election in that particular year. Your task is to analyse the trend and find the years in which, one party, which won many elections consecutively, was suddenly defeated by another.

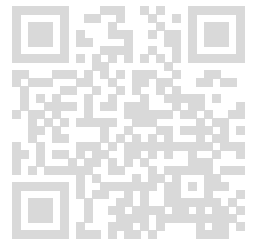
Input Description:Size of the array, followed by 2 arrays, one containing the year values and the other containing the party which won the election that year.

Output Description:The year of transition from one party to another.

Sample Input:52004 1999 2019 2009 2014JDU JDU CON JDU CON

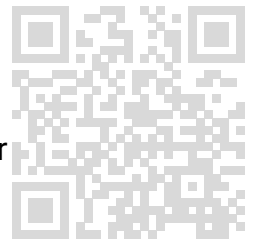
Sample Output:2014

Explanation:There has been a shift in government from JDU to CON in the 2014 election.



Input Description:

Size of the array, followed by 2 arrays, one containing the year values and the other containing the party which won the election that year.



Output Description:

The year of transition from one party to another.

Completion Status: Completed

Concepts Included:

searching

array

Language Used: PYTHON 3

Source Code:

```
n = int(input().strip())
years = list(map(int, input().strip().split()))
parties = input().strip().split()
```

```
# Pair year with party and sort by year
elections = sorted(zip(years, parties))
```

```
# Collect and print all transition years
for i in range(1, n):
    if elections[i][1] != elections[i-1][1]:
        print(elections[i][0])
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
1985
1995
2005
```

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2005

Compilation Status: Passed

Execution Time:

0.01s

125. Problem Statement: Given a number N print a right angled triangle structure with the starting level as single 1 and every immediate proceeding level with 2 more additional ones than the previous level .Repeat the pattern for N levels.

Input Description: Input Size : $N \leq 1000$

Sample Input: 3

Sample Output: 1 1 1 1 1 1 1

Completion Status: Completed

Concepts Included:

trees and graphs

array

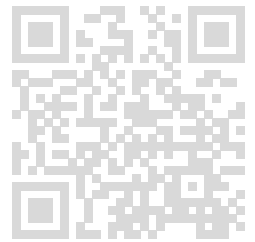
companies

Language Used: PYTHON 3

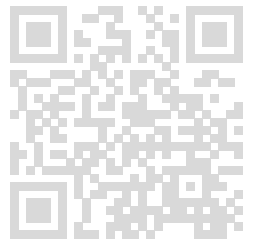
Source Code:

```
n = int(input().strip())
```

```
for i in range(n):
```



```
count = 2 * i + 1  
print(" ".join(["1"] * count))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
1  
1 1 1  
1 1 1 1 1  
1 1 1 1 1 1 1
```

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

```
1  
1 1 1  
1 1 1 1 1  
1 1 1 1 1 1 1  
1 1 1 1 1 1 1 1 1
```

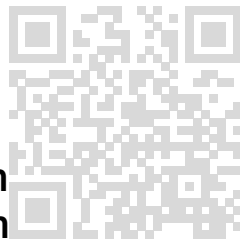
Compilation Status: Passed

Execution Time:

0.01s

126. Problem Statement:Rajesh and Ram are having a conflict on the maximum marks that they have scored in all the exams

conducted in the past year. The one having scored the maximum gets a treat from the other. They decide to go through their test papers and record their highest marks. You are Rajesh's best friend and as he has tuitions to attend, he gives you all his test papers and asks you to find out the maximum marks that he has scored among all the marks in all exams. He promises you a treat if he wins the bet with Ram. Help Rajesh find out his highest marks.



Constraints: $1 \leq N \leq 100$ $1 \leq A_i \leq 100$

Input Description: First line contains count of marks. Next line is the list of marks obtained by Rajesh.

Output Description: Highest marks obtained by Rajesh.

Sample Input: 382 96 72

Sample Output: 96

Explanation: The highest marks he has scored is 96.

Input Description:

First line contains count of marks. Next line is the list of marks obtained by Rajesh.

Output Description:

Highest marks obtained by Rajesh.

Completion Status: Completed

Concepts Included:

searching

array

Language Used: PYTHON 3

Source Code:

```
# Read input
n = int(input().strip())
marks = list(map(int, input().split()))
```

```
# Find maximum mark
print(max(marks))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

888

Compilation Status: Passed

Execution Time:

0.01s

127. Problem Statement: You are given with a list of size 'n'. The list is imposed with a condition that all elements must be of range 0 to n-1. Your task is to rearrange the numbers such that $arr[i]$ becomes $arr[arr[i]]$.

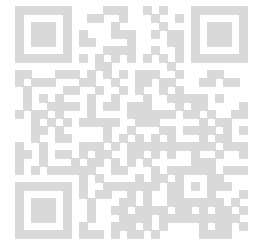
Input Description: You are given size of array 'n'. n space separated numbers in next line.

Output Description: Print all elements after rearranging.

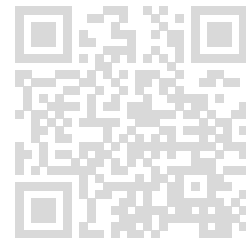
Explanation: Solution first index let $i=0$, $arr[0]=arr[arr[0]]$ initially $arr[0]=4$ Now $arr[0]$ will become $arr[4]$ hence $arr[0]=3$

Sample Input: 5 4 0 2 1 3

Sample Output: 3 4 2 0 1



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Input Description:

You are given size of array 'n'.n space separated numbers in next line.

Output Description:

Print all elements after rearranging.

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
# Read input
n = int(input().strip())
arr = list(map(int, input().split()))
```

```
# Rearranged array
result = [0] * n
for i in range(n):
    result[i] = arr[arr[i]]
```

```
# Print result
print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3 4 2 0 1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0 1

Compilation Status: Passed

Execution Time:

0.01s

128. Problem Statement: You are given an array F of focal lengths of size f , $F[0], F[1], \dots, F[f-1]$. You are asked to determine the indices of the elements from the biggest element to the smallest element.

Input Description: The first line contains an integer f . The next line contains f space separated integers $F[i]$, ($0 \leq i \leq f-1$)

Output Description: Print f space separated integers, denoting the indices of the elements, from biggest element to smallest.

Explanation: 5 is biggest, 4 is second biggest and 1 is smallest. So, the indices of 5, 4 and 1 are printed in order.

Sample Input: 3 1 5 4

Sample Output: 1 2 0

Input Description:

The first line contains an integer f .

The next line contains f space separated integers $F[i]$, ($0 \leq i \leq f-1$)

Note: The elements of $F[i]$ are pairwise distinct.

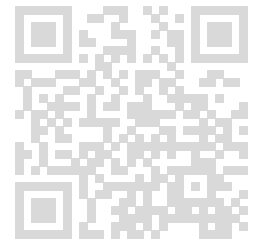
Output Description:

Print f space separated integers, denoting the indices of the elements, from biggest element to smallest.

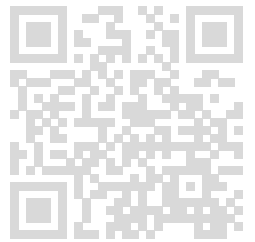
Completion Status: Completed

Concepts Included:

array



hashing



Language Used: PYTHON 3

Source Code:

```
# Read input
f = int(input().strip())
F = list(map(int, input().split()))

# Pair each element with its index
paired = [(i, F[i]) for i in range(f)]

# Sort by value descending
paired.sort(key=lambda x: x[1], reverse=True)

# Print only indices
print(*[i for i, val in paired])
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

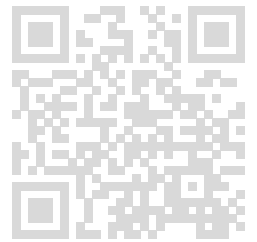
Output:

3 6 5 1 0 2 4 7

Compilation Status: Passed

Execution Time:

0.01s



129. Problem Statement: Given a number N and an array of N integers, find the sum of all the negative numbers in the array.

Input Description: The input consists of an integer N, followed by N integers. N is less than or equal to 100000.

Sample Input: 23 0

Sample Output: 0

Completion Status: Completed

Concepts Included:

array

mathematics

Language Used: PYTHON 3

Source Code:

```
# Read input
n = int(input().strip())
arr = list(map(int, input().split()))

# Sum only negative numbers
neg_sum = sum(x for x in arr if x < 0)

print(neg_sum)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

130. Problem Statement: Your old mobile phone gets broken and so you want to purchase a new smartphone and decide to go through all the online websites to find out which dealer has the best offer for a particular model. You document the prices of N dealers. Dealer ids start from 0 and go up to N. Find out which dealer has the best price for you. Constraints: $1 \leq N \leq 100$ $1 \leq A[i] \leq 100000$

Input Description: Number of dealers followed by the price offered by each dealer

Output Description: Dealer offering the best price.

Sample Input: 3 10000 11200 12030

Sample Output: Dealer0

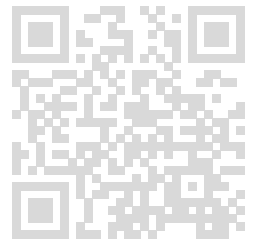
Explanation: Dealer0 offers the lowest price of 10000.

Input Description:

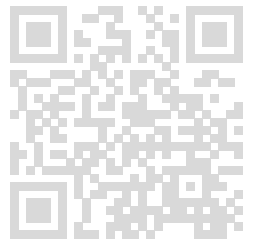
Number of dealers followed by the price offered by each dealer

Output Description:

Dealer offering the best price.



Completion Status: Completed



Concepts Included:

searching

array

Language Used: PYTHON 3

Source Code:

```
n = int(input())          # number of dealers
prices = list(map(int, input().split()))

# Find index of minimum price
best_index = prices.index(min(prices))

print(f"Dealer{best_index}")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Dealer9

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

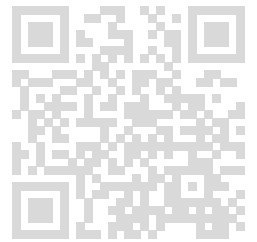
Output:

Dealer0

Compilation Status: Passed

Execution Time:

0.01s



131. Problem Statement: Given a number N, print the sum of squares of all its digits.

Input Description: The input consists of a number N, where $1 \leq N \leq 100000$.

Output Description: The output is the sum of squares of all digits of N.

Sample Input: 12

Sample Output: 5

Completion Status: Completed

Concepts Included:

array

mathematics

Language Used: PYTHON 3

Source Code:

```
n = input().strip() # take input as string to easily iterate digits
total = sum(int(d)**2 for d in n)
print(total)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

144

Compilation Status: Passed

Execution Time:

0.01s

132. Problem Statement:The prison warden at Central jail is given a tip-off that a prison inmate is planning an escape. The warden suspects a particular prisoner of planning an escape and wants to find out if he/she is present in his/her cell. The layout of the prison is modelled in a matrix with every cell of the matrix representing a prison cell. The matrix is filled with the prisoner ids at the corresponding cells. Find out whether the person the warden suspects is present in the prison or not.

Input Description:First line contains the dimensions of the prison matrix, followed by the ids of prisoners as elements of the matrix. The third line contains the id to be searched.

Output Description:(yes/no) whether the given element is present in the matrix or not.

Explanation:Prisoner with id 11 is not present in the prison and has substituted some other prisoner in his cell.

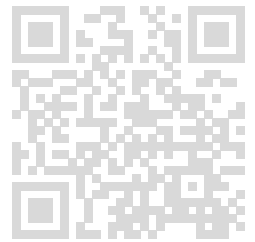
Sample Input:2 52 3 0 7 1 5 3 4 1 8 11

Sample Output:no

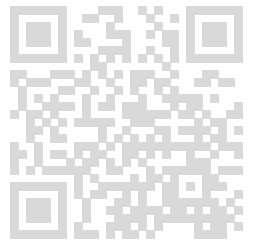
Input Description:

First line contains the dimensions of the prison matrix, followed by the ids of prisoners as elements of the matrix. The third line contains the id to be searched.

Output Description:



(yes/no) whether the given element is present in the matrix or not.



Completion Status: Completed

Concepts Included:

searching

array

Language Used: PYTHON 3

Source Code:

```
# Read dimensions
r, c = map(int, input().split())

# Read matrix elements (r*c numbers)
elements = list(map(int, input().split()))

# Read the prisoner id to search
target = int(input())

# Check if target exists in the matrix
if target in elements:
    print("yes")
else:
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

133. Problem Statement: You are given an array of numbers. Print the least occurring element. If there is more than 1 element print all of them in decreasing order of their value.

Input Description: You are given a number 'n' denoting size of array. Next line contains n space separated numbers.

Output Description: Print the number as mentioned

Explanation: Self Explanatory

Sample Input: 91 6 4 56 56 56 6 4 2

Sample Output: 2 1

Input Description:

You are given a number 'n' denoting size of array. Next line contains n space separated numbers.

Output Description:

Print the number as mentioned

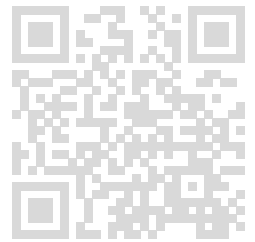
Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:



```
from collections import Counter
```

```
# Input
```

```
n = int(input().strip())
```

```
arr = list(map(int, input().split()))
```

```
# Count occurrences
```

```
count = Counter(arr)
```

```
# Find minimum frequency
```

```
min_freq = min(count.values())
```

```
# Collect elements with least frequency
```

```
least_occurring = [num for num, freq in count.items() if freq == min_freq]
```

```
# Sort in decreasing order
```

```
least_occurring.sort(reverse=True)
```

```
# Print result
```

```
print(*least_occurring)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 1

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

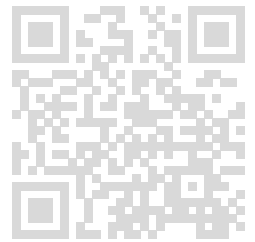
Input:

< hidden >

Expected Output:

< hidden >

Output:

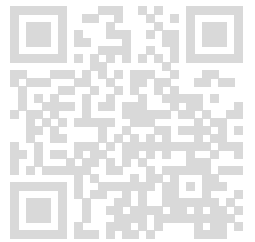


Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.012s



134. Problem Statement:Prakash is bored and wants to spends his time. He starts rolling a die and observes the value that is shown. He rolls the dice N times and observes that just one number appears distinctly, all the others get repeated or does not appear at all. Find out which was the number that puzzled Prakash for sometime, after which he realised that it was just a coincidence.

Input Description:The first line contains a positive integer N, denoting the size of the array. The second line contains N positive integers, denoting the face values that appeared when the die was rolled.

Output Description:Print out the singly occurring number.

Sample Input:51 1 2 5 5

Sample Output:2

Explanation:The only number occurring distinctly is 2.

Input Description:

The first line contains a positive integer N, denoting the size of the array. The second line contains N positive integers, denoting the face values that appeared when the die was rolled.

Output Description:

Print out the singly occurring number.

Completion Status: Completed

Concepts Included:

searching

array

Language Used: PYTHON 3

Source Code:


```
from collections import Counter
```

```
# Input
n = int(input().strip())
arr = list(map(int, input().split()))
```

```
# Count frequencies
count = Counter(arr)
```

```
# Find the number that occurs once
for num, freq in count.items():
    if freq == 1:
        print(num)
        break
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.012s

TestCase2:

Input:

< hidden >

Expected Output:

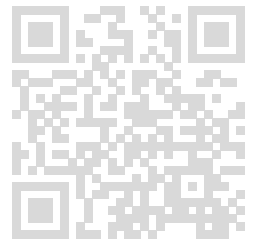
< hidden >

Output:

7

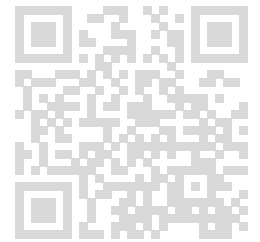
Compilation Status: Passed

Execution Time:



Mohammed (sinwanmohammed022@gmail.com)

0.011s



135. Problem Statement: Given 2 numbers N and K followed by N elements, print the number of repetition of K otherwise print '-1' if the element not found.

Sample Input: 6 21 2 3 5 7 8

Sample Output: 1

Completion Status: Completed

Concepts Included:

basics

mathematics

array

Language Used: PYTHON 3

Source Code:

```
# Input
n, k = map(int, input().split())
arr = list(map(int, input().split()))

# Count occurrences of k
count = arr.count(k)

if count == 0:
    print(-1)
else:
    # repetitions means beyond first occurrence
    print(count - 1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

136. Problem Statement:An organization named "JPOKS" has a well-maintained library in its own building. Librarian orders and gets books for the library very frequently. Each book which is newly arrived has its own unique serial number. The books initially are placed in descending order. The librarian want to place a new book without disturbing the descending order of books in terms of unique id. Now you must help librarian to find the right spot for placing the book.

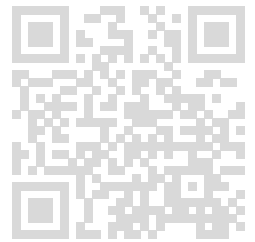
Input Description:The first line of program contains integer 'n' denoting no. of books already placed in the shelf. Next line contains n serial number of already placed books. Next line contains integer m denoting no of new books to be placed on the shelf. Next line contains m serial numbers of new book.

Output Description:print the position at which it must be placed

Explanation:a)Our array is 95 68 62 58 55 41 30We have to put book numbered 45 on shelf it will be placed between 55 and 41.The new array will be 95 68 62 58 55 45 41 30Position will be 6(index starts from 1)b) our array now is 95 68 62 58 55 45 41 30. We have to put book numbered 61 on shelf it will be placed between 62 and 58.Position will be 4(index starts from 1)

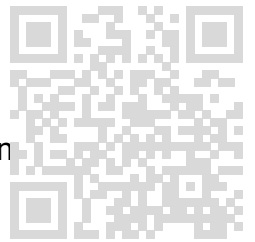
Sample Input:795 68 62 58 55 41 30245 61

Sample Output:6 4



Input Description:

The first line of program contains integer 'n' denoting no. of books already placed in the shelf. Next line contains n serial number of already placed books. Next line contains integer m denoting no of new books to be placed on the shelf. Next line contains m serial numbers of new book.



Output Description:

print the position at which it must be placed

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))
m = int(input())
new_books = list(map(int, input().split()))

positions = []

for book in new_books:
    pos = 1
    for i in arr:
        if book < i: # since descending
            pos += 1
    else:
        break
    positions.append(pos)

print(*positions)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6 4

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

0.01s

137. Problem Statement:Rajesh was going through alternative array sorting. He wishes to print the array alternatively. Hence hired you. Your task is to help rajesh in printing the array alternatively. An alternative array is an array in which first element is maximum of the whole array second element is minimum of the whole array. Third element is the second largest. Fourth element is the second smallest And so on. print the array in the desired manner.

Input Description:You are given with the length of array 'n'. followed by 'n' space separated numbers.

Output Description:Print the array as mentioned.

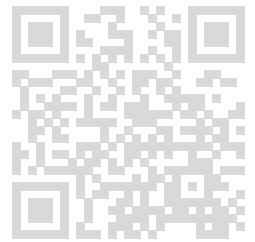
Explanation:Self Explanatory

Sample Input:51 7 11 16 19

Sample Output:19 1 16 7 11

Input Description:

You are given with the length of array 'n'. followed by 'n' space separated numbers.



Output Description:

Print the array as mentioned.

Completion Status: Completed

Concepts Included:

array

Zoho

guvi-learning-path

Language Used: PYTHON 3

Source Code:

```
data = []
while True:
try:
data.extend(map(int, input().split()))
except EOFError:
break
```

```
n = data[0]
arr = data[1:]
arr.sort()
```

```
res = []
i, j = n - 1, 0
turn = True
while i >= j:
if turn:
res.append(arr[i])
i -= 1
else:
res.append(arr[j])
j += 1
turn = not turn
```

```
print(*res)
```

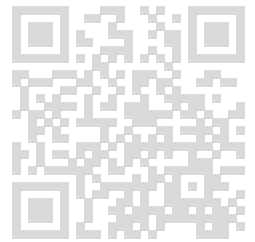
Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

19 1 16 7 11

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

110 10 100 20 90 30 80 40 70 50 60

Compilation Status: Passed

Execution Time:

0.01s

138. Problem Statement: Ramit is given a list of both positive and negative integers. He has to tell the maximum sum out of all subarrays in the given list. He got confused and requested help from you. Now it is your task to find the maximum sum out of all subarrays in the given list.

Input Description: You are given a number 'n'. Next line contains n space separated numbers.

Output Description: Print the max sum of subarray.

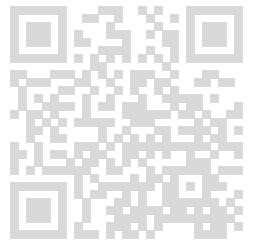
Explanation: Solution consider the whole array we get 9 as sum which is maximum

Sample Input: 5 1 2 3 -2 5

Sample Output: 9

Input Description:

You are given a number 'n'. Next line contains n space separated numbers.



Output Description:

Print the max sum of subarray.

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))

max_so_far = arr[0]
current_sum = arr[0]

for i in range(1, n):
    current_sum = max(arr[i], current_sum + arr[i])
    max_so_far = max(max_so_far, current_sum)

print(max_so_far)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

9

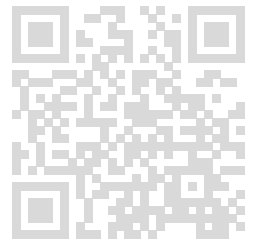
Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

139. Problem Statement:Prateek finds it difficult to judge the minimum element in the list of elements given to him. Your task is to develop the algorithm in order to find the minimum element.

Input Description:You are given 'n' number of elements. Next line contains n space separated numbers.

Output Description:Print the minimum element

Explanation:Self Explanatory

Sample Input:53 4 9 1 6

Sample Output:1

Input Description:

You are given 'n' number of elements. Next line contains n space separated numbers.

Output Description:

Print the minimum element

Completion Status: Completed

Concepts Included:

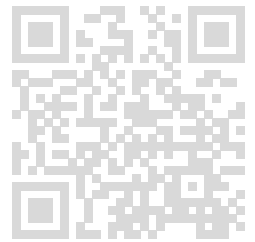
array

numbers

mathematics

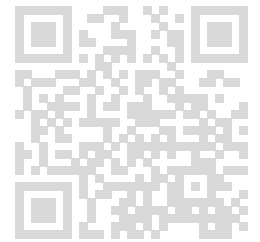
Language Used: PYTHON 3

Source Code:



```
n = int(input())
arr = list(map(int, input().split()))

print(min(arr))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

140. Problem Statement: Ram and Sita are playing a game. There are N rounds for the game and the results are tabulated in a table of dimensions N x N. A '0' in the table implies that Ram has won the game, while a '1' denotes that Sita has won the game. You must compute the number of times Ram and Sita have won the game, individually. Note : Elements in table can only be either 1 or 0.

Input Description:First line contains two space separated integers M,N denoting the size of the 2d matrix . Then in the next lines are the space separated values of the matrix mat[] [] .

Output Description:The output will be the number of 0s and number of 1s, displayed separately.

Sample Input:1 3
1 1 1

Sample Output:RAM: 0
SITA: 3

Explanation:There are 3 ones in the matrix. Thus it means that Sita has won 3 times and Ram has won 0 out of the total 3 games.

Input Description:

First line contains two space separated integers M,N denoting the size of the 2d matrix . Then in the next lines are the space separated values of the matrix mat[] [] .

Constraints:

1<=M,N<=50
,0<=mat[i][j]<=1

Output Description:

The output will be the number of 0s and number of 1s, displayed separately.

Completion Status: Completed

Concepts Included:

searching

array

Language Used: PYTHON 3

Source Code:

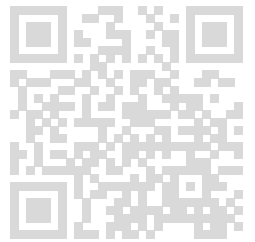
```
# Read dimensions
m, n = map(int, input().split())

# Read the matrix values
matrix = []
for _ in range(m):
    row = list(map(int, input().split()))
    matrix.extend(row) # flatten into one list

# Count wins
ram_wins = matrix.count(0)
sita_wins = matrix.count(1)

# Print result
```

```
print(f"RAM: {ram_wins}")
print(f"SITA: {sita_wins}")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

RAM: 6
SITA: 3

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

RAM: 4
SITA: 4

Compilation Status: Passed

Execution Time:

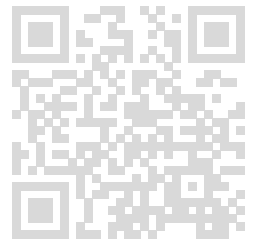
0.01s

141. Problem Statement: Given a range of 2 numbers (i.e) L and R count the number of prime numbers in the range (inclusive of L and R).

Input Description: Input Size : $L \leq R \leq 100000$ (complexity $O(n)$ read about Sieve of Eratosthenes)

Sample Input:2 5

Sample Output:3



Completion Status: Completed

Concepts Included:

mathematics

basics

Language Used: PYTHON 3

Source Code:

```
def sieve(n):  
    """Return a list where prime[i] is True if i is prime."""  
    prime = [True] * (n + 1)  
    prime[0], prime[1] = False, False  
  
    p = 2  
    while p * p <= n:  
        if prime[p]:  
            for i in range(p * p, n + 1, p):  
                prime[i] = False  
            p += 1  
    return prime  
  
# Input  
L, R = map(int, input().split())  
  
# Generate sieve up to R  
prime = sieve(R)  
  
# Count primes in range [L, R]  
count = sum(1 for i in range(L, R + 1) if prime[i])  
  
print(count)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

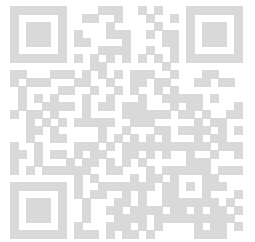
0.009s

TestCase4:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.01s

142. Problem Statement: Write a code to get a integer n as input and calculate the smallest perfect power of 2 greater than n.

Input Description: A single line containing an integer, n.

Output Description: Print the smallest perfect power of 2 greater than n.

Explanation: The smallest perfect power of 2 greater than 48 is 64.

Sample Input: 48

Sample Output: 64

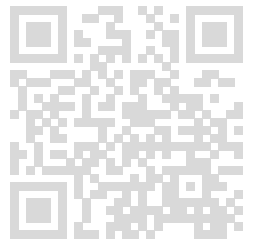
Input Description:

A single line containing an integer, n.

Output Description:

Print the smallest perfect power of 2 greater than n.

Completion Status: Completed

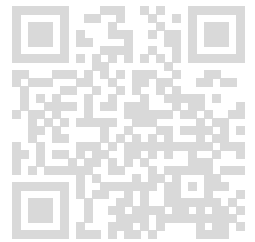


Concepts Included:

basics

bit manipulation

Looping



Language Used: PYTHON 3

Source Code:

```
# Read input
n = int(input().strip())

# Start with 1 and keep doubling until it's greater than n
power = 1
while power <= n:
    power *= 2

print(power)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

64

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

256

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.012s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

32

Compilation Status: Passed

Execution Time:

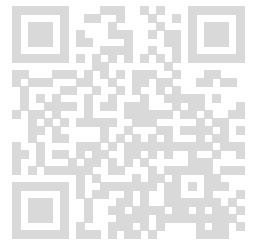
0.01s

TestCase5:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

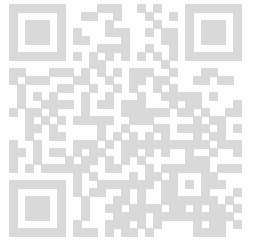
Output:

512

Compilation Status: Passed

Execution Time:

0.01s



143. Problem Statement: Given a number N and an array of N elements, find the Bitwise OR of the array elements.

Input Description: Input Size : $N \leq 100000$

Output Description: The output is the Bitwise OR of the array elements.

Sample Input: 22 4

Sample Output: 6

Completion Status: Completed

Concepts Included:

bitwise

basics

Language Used: PYTHON 3

Source Code:

```
# Read input
n = int(input().strip())
arr = list(map(int, input().split()))

# Compute bitwise OR of all elements
result = 0
for num in arr:
    result |= num

print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

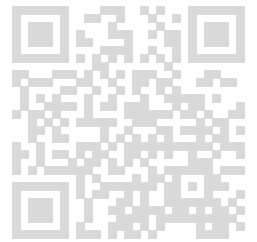
2

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

9

Compilation Status: Passed

Execution Time:

0.009s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

351

Compilation Status: Passed

Execution Time:

0.009s

144. Question:Given 3 numbers N , L and R. Print 'yes' if N is between L and R else print 'no'.

Sample Input:32 6

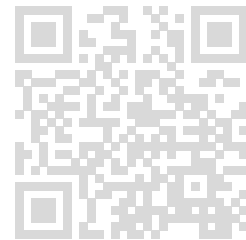
Sample Output:yes

Completion Status: Completed

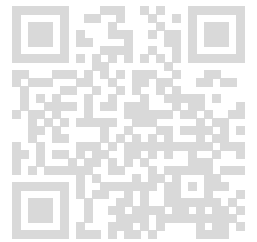
Concepts Included:

mathematics

basics



Language Used: PYTHON 3



Source Code:

```
N = int(input())  
L , R = map(int,input().split())
```

```
if L < N < R:  
    print("yes")  
else:  
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

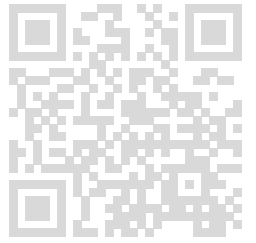
no

Compilation Status: Passed

Execution Time:

0.01s

Mohammed (sinwanmohammed022@gmail.com)



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

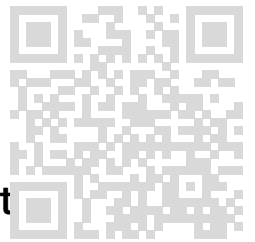
no

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.011s



145. Problem Statement: Given 3 numbers A,B,C process and print 'yes' if they can form the sides of a triangle otherwise print 'no'.

Input Description: The input consists of three numbers A, B, and C, where A, B, C are less than or equal to 100000.

Output Description: Print 'yes' if the given numbers A, B, and C can form the sides of a triangle, otherwise print 'no'.

Sample Input: 3 4 5

Sample Output: yes

Completion Status: Completed

Concepts Included:

mathematics

basics

Language Used: PYTHON 3

Source Code:

```
A, B, C = map(int, input().split())
```

```
if A + B > C and B + C > A and C + A > B:  
    print("yes")  
else:  
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.011s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

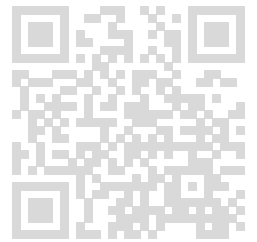
< hidden >

Expected Output:

< hidden >

Output:

no

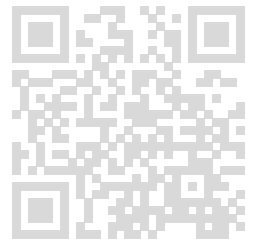


Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.01s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

146. Problem Statement: Given a string 'S' swap the even and odd characters starting from index 1 (Assume the index starts from 0).

Input Description: Input Size : $|s| \leq 10000000$ (complexity $O(n)$)

Sample Input: codekata

Sample Output: ocedakat

Completion Status: Completed

Concepts Included:

basics

array

strings

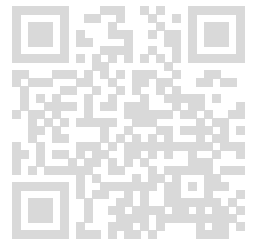
Language Used: PYTHON 3

Source Code:

```
s = input().strip()
chars = list(s)
```

```
# swap adjacent characters
for i in range(0, len(chars) - 1, 2):
    chars[i], chars[i+1] = chars[i+1], chars[i]

print("".join(chars))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ugiv

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ejardl

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

2143

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

egkes

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

oced

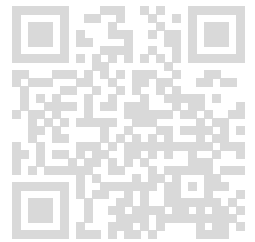
Compilation Status: Passed

Execution Time:

0.011s

147. Problem Statement: Given a number N and an array of N elements, find the Bitwise AND of the array elements.

Input Description: The input consists of an integer N, representing the size of the array,



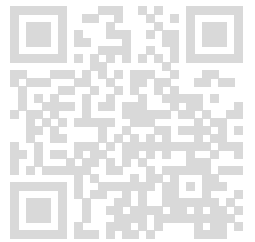
Mohammed (sinwanmohammed022@gmail.com)

followed by N array elements. $N \leq 100000$.

Output Description: The output is the Bitwise AND of all elements in the array.

Sample Input: 44 3 2 1

Sample Output: 0



Completion Status: Completed

Concepts Included:

basics

Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))
```

```
result = arr[0]
for num in arr[1:]:
    result &= num # bitwise AND
```

```
print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.009s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

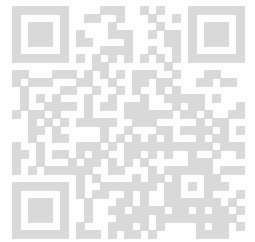
1

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

148. Problem Statement: Given 3 numbers A,B,C print 'yes' if they can form the sides of a scalene triangle else print 'no'.

Input Description: Input Size : A,B,C <= 100000

Sample Input: 3 4 5

Sample Output: yes

Completion Status: Completed

Concepts Included:

mathematics

basics

Language Used: PYTHON 3

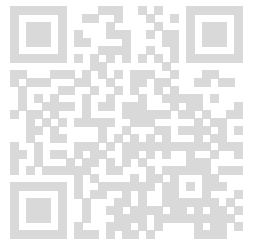
Source Code:

```
A, B, C = map(int, input().split())
```

```
if (A + B > C and A + C > B and B + C > A) and (A != B and B != C and A != C):  
    print("yes")  
else:  
    print("no")
```

Compilation Details:**TestCase1:**

Input:



< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

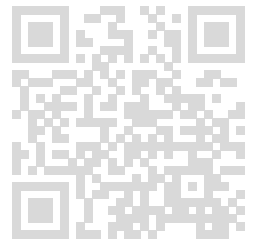
yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.009s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

149. Problem Statement: Given 3 numbers A,B,C print 'yes' if they can form the sides of a right angled triangle, otherwise 'no'.

Input Description: The input consists of three numbers A, B, and C, where A, B, C are less than or equal to 100000.

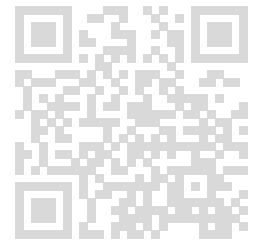
Sample Input: 3 4 5

Sample Output: yes

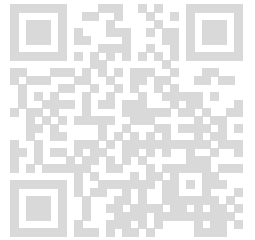
Completion Status: Completed

Concepts Included:

mathematics



basics



Language Used: PYTHON 3

Source Code:

```
A, B, C = map(int, input().split())
```

```
# Check triangle inequality first
```

```
if A + B > C and A + C > B and B + C > A:
```

```
# Check Pythagoras condition
```

```
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")
```

```
else:
```

```
print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

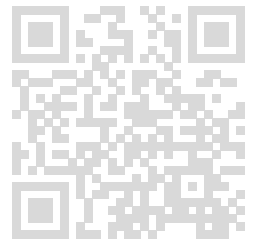
Output:

yes

Compilation Status: Passed

Execution Time:

0.011s



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

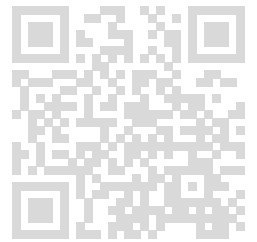
Mohammed (sinwanmohammed022@gmail.com)

no

Compilation Status: Passed

Execution Time:

0.01s



150. Problem Statement: Write a program to print the sum of the first K natural numbers.

Input Description: Input Size : $n \leq 100000$

Sample Input: 3

Sample Output: 6

Completion Status: Completed

Concepts Included:

basics

mathematics

Language Used: PYTHON 3

Source Code:

```
K = int(input())  
print(K * (K + 1) // 2)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

210

Compilation Status: Passed

Execution Time:

0.009s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

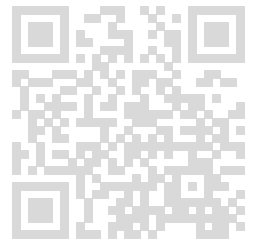
Expected Output:

< hidden >

Output:

820

Compilation Status: Passed



Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

15

Compilation Status: Passed

Execution Time:

0.01s

151. Problem Statement:Let P represent Paper, R represent Rock and S represent Scissors. Given 2 out of the 3 determine which one wins. If its a draw print 'D'.

Sample Input:R P

Sample Output:P

Completion Status: Completed

Concepts Included:

strings

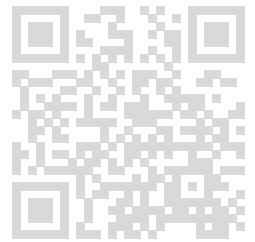
basics

Language Used: PYTHON 3

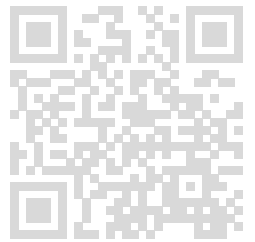
Source Code:

```
a, b = input().split()
```

```
if a == b:  
    print("D")  
elif (a == "R" and b == "S") or (a == "S" and b == "R"):  
    print("R")  
elif (a == "S" and b == "P") or (a == "P" and b == "S"):
```



```
print("S")
elif (a == "P" and b == "R") or (a == "R" and b == "P"):
print("P")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

D

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

D

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

S

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

R

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

D

Compilation Status: Passed

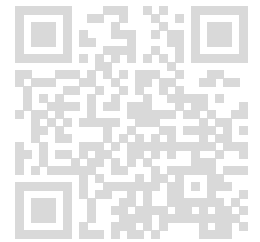
Execution Time:

0.01s

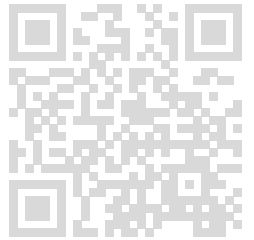
152. Problem Statement: Given an array of N elements switch (swap) the element with the adjacent element and print the output.

Sample Input: 53 2 1 2 3

Sample Output: 2 3 2 1 3



Mohammed (sinwanmohammed022@gmail.com)



Completion Status: Completed

Concepts Included:

mathematics

array

bitwise

basics

Language Used: PYTHON 3

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))

for i in range(0, n - 1, 2):
    arr[i], arr[i + 1] = arr[i + 1], arr[i]

print(*arr)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3 2 5 4 5 6

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 3 2 3 1

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

2 3 2 3 2 3 1

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

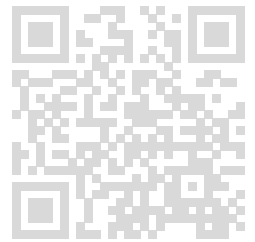
Output:

3 4 3 4 2

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:**Input:**

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

2 3 2 1 3

Compilation Status: Passed

Execution Time:

0.01s

153. Problem Statement:The Caesar Cipher technique is one of the earliest and simplest method of encryption technique. It's simply a type of substitution cipher, i.e., each letter of a given text is replaced by a letter some fixed number of positions down the alphabet. For example with a shift of 1, A would be replaced by B, B would become C, and so on. The method is apparently named after Julius Caesar, who apparently used it to communicate with his officials. For the given input string(S) and shift print the encrypted string.

Sample Input:ABCdEFGHIJKLMNOPQRSTUVWXYZ 23

Sample Output:XYZaBCDEFGHIJKLMNOPQRSTUVWXYZ

Completion Status: Not Completed

Concepts Included:

mathematics

basics

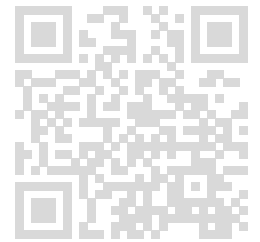
Language Used: PYTHON 3

Source Code:

```
s, k = input().rsplit(' ', 1)
k = int(k)

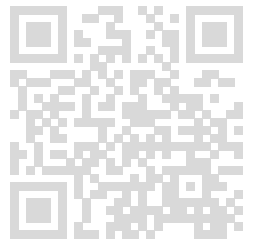
result = ""

for ch in s:
    if 'A' <= ch <= 'Z': # uppercase
        result += chr((ord(ch) - ord('A') - k) % 26 + ord('A'))
```



```
elif 'a' <= ch <= 'z': # lowercase
result += chr((ord(ch) - ord('a') - k) % 26 + ord('a'))
else:
result += ch

print(result)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

WPPWYGWPKJYA

Compilation Status: Failed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

w

Compilation Status: Failed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

xpawc

Compilation Status: Failed

Execution Time:

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

attackatonce

Compilation Status: Passed

Execution Time:

0.009s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

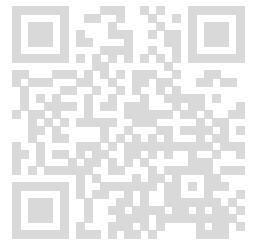
BYFFIZLCYHX

Compilation Status: Failed

Execution Time:

0.01s

154. Problem Statement:Given a number N followed by N



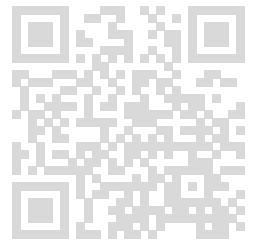
Mohammed (sinwanmohammed022@gmail.com)

numbers. Find the smallest number and largest number and print both the indices (1 based indexing).

Input Description: Input Size : $N \leq 100000$

Sample Input: 51 2 3 4 5

Sample Output: 1 5



Completion Status: Completed

Concepts Included:

array

basics

Language Used: PYTHON 3

Source Code:

```
# Read input
n = int(input())
arr = list(map(int, input().split()))

# Find smallest and largest with indices
min_val = min(arr)
max_val = max(arr)

min_index = arr.index(min_val) + 1 # +1 for 1-based indexing
max_index = arr.index(max_val) + 1

print(min_index, max_index)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 5

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4 1

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 2

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

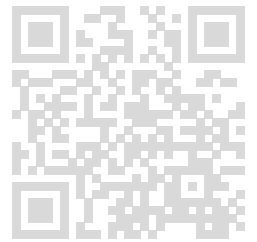
< hidden >

Expected Output:

< hidden >

Output:

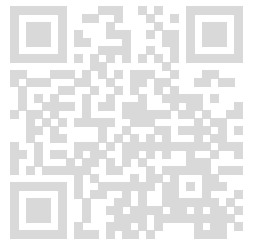
3 5



Compilation Status: Passed

Execution Time:

0.01s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4 2

Compilation Status: Passed

Execution Time:

0.01s

155. Problem Statement: Given 2 numbers N,M find the GCD of N and M. If it cannot be found for given number(s) then print -1

Sample Input: 10 5

Sample Output: 5

Completion Status: Not Completed

Concepts Included:

mathematics

basics

Language Used: PYTHON 3

Source Code:

```
import math
```

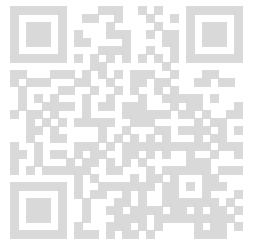
```
n, m = map(int, input().split())
```

```
if n == 0 and m == 0:
```

```
    print(-1)
```

```
else:
```

```
print(math.gcd(abs(n), abs(m)))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

12

Compilation Status: Failed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Mohammed (sinwanmohammed022@gmail.com)

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

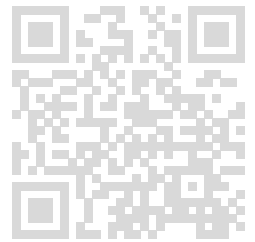
3

Compilation Status: Passed

Execution Time:

0.01s

156. Problem Statement:A man has n buckets. He travels all the bucket and fills the water in bucket which is empty and empty the bucket which is already filled he goes for n times in this manner On first go 1,2,3,4,5,... n On second go 2,4,6,8... On third go 3,6,9... Your task is to develop a suitable algorithm in order to find the number of buckets which are filled with water at the end of last go. **NOTE:**



Mohammed (sinwanmohammed022@gmail.com)

INITIALLY ASSUME EVERY BUCKET IS EMPTY

Input Description: First line of test case contains a positive number. Which means that there are these many buckets.

Output Description: Print the number of buckets which are still having water.

Explanation: On start every bucket is empty after 1 go 1 2 3 4 are filled with water. On second go 1 and 3 are filled with water 2 and 4 are not. On 3 go 1 is only filled with water. On 4 go 1 and 4 are filled with water

Sample Input: 4

Sample Output: 2

Input Description:

First line of test case contains a positive number. Which means that there are these many buckets.

Output Description:

Print the number of buckets which are still having water.

Completion Status: Completed

Concepts Included:

mathematics

aptitude

Language Used: PYTHON 3

Source Code:

```
import math

n = int(input().strip())

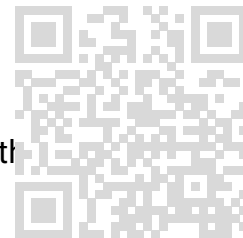
# Count of perfect squares <= n
result = int(math.isqrt(n))

print(result)
```

Compilation Details:

TestCase1:

Input:



< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

19

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

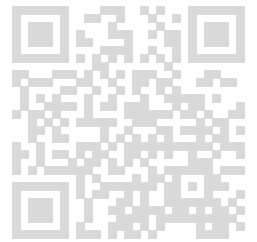
223

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

159

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.014s

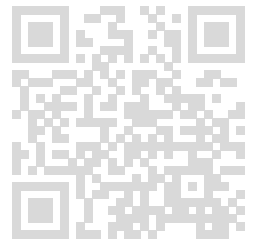
157. Problem Statement: Find the man who will survive. There is a scenario that only one person will survive. 'N' person will stand in a circle. Initially first person will be holding the gun. You are given with number 'k'. The person who is holding the gun has to count to 'k' starting from him and shoot the person at which k ends and then pass the gun to next alive person. Your task is to find the place where you will survive.

Input Description: Two numbers – 'N' and 'k'

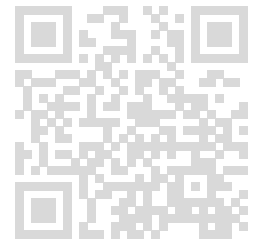
Output Description: Find the place where you will be safe (indexing at 1)

Explanation: Assume two person on circle. According to given scenario he has to count k times before firing the shot. Now as k=1 he counts 1 from him He has to shoot himself. Hence the alive person is 2

Sample Input: 21



Sample Output:2



Input Description:

Two numbers – 'N' and 'k'

Output Description:

Find the place where you will be safe (indexing at 1)

Completion Status: Completed

Concepts Included:

mathematics

linkedList

array

aptitude

Language Used: PYTHON 3

Source Code:

```
def josephus(n, k):  
    survivor = 0 # base case: when n=1, survivor=0  
    for i in range(2, n+1):  
        survivor = (survivor + k) % i  
    return survivor + 1 # convert to 1-based index
```

```
# Input  
n = int(input())  
k = int(input())
```

```
# Output  
print(josephus(n, k))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6

Compilation Status: Passed

Execution Time:

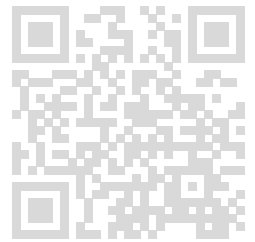
0.009s

TestCase4:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

158. Problem Statement: Given a number N, print its factors.

Input Description: Input Size : $n \leq 1000$

Sample Input: 6

Sample Output: 1 2 3 6

Completion Status: Completed

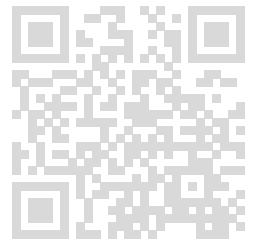
Concepts Included:

mathematics

Language Used: PYTHON 3

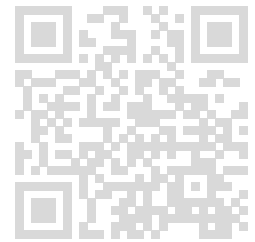
Source Code:

```
import math
import sys
```



```
data = sys.stdin.read().strip().split()
if not data:
    sys.exit(0)

N = int(data[0])
if N == 0:
    print(0)
else:
    n = abs(N)
    divs = set()
    root = math.isqrt(n)
    for i in range(1, root + 1):
        if n % i == 0:
            divs.add(i)
            divs.add(n // i)
    result = " ".join(map(str, sorted(divs)))
    print(result)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 5 10

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 3 4 6 12

Compilation Status: Passed

Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 4 8

Compilation Status: Passed

Execution Time:

0.015s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 3 9

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

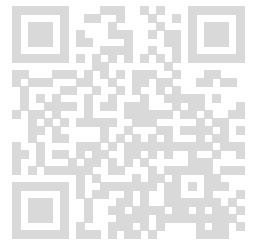
< hidden >

Expected Output:

< hidden >

Output:

1 2 3 6

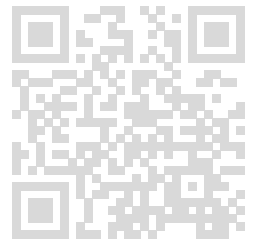


Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.011s



159. Problem Statement: Given a number N, check whether it is prime or not. Print 'yes' if it is prime else print 'no'.

Input Description: The input consists of a single integer N.

Output Description: The output is 'yes' if N is prime, otherwise 'no'.

Sample Input: 123

Sample Output: no

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
import math
```

```
N = int(input().strip())
```

```
if N <= 1:
```

```
    print("no")
```

```
else:
```

```
    is_prime = True
```

```
    for i in range(2, int(math.sqrt(N)) + 1):
```

```
        if N % i == 0:
```

```
            is_prime = False
```

```
            break
```

```
    print("yes" if is_prime else "no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

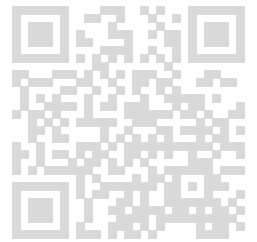
Execution Time:

0.014s

TestCase4:

Input:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.015s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

160. Question: Given a number N, find its next immediate greater power of 2 (i.e 2^1 , 2^2 , 2^3 ...).

Input Description: The input consists of a number N where $N \leq 1000$.

Sample Input: 4

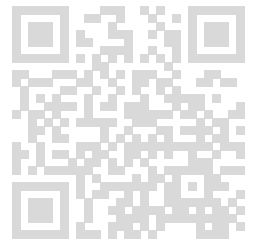
Sample Output: 8

Completion Status: Completed

Concepts Included:

mathematics

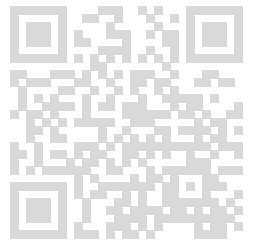
Language Used: PYTHON 3

Source Code:

```
N = int(input().strip())
```

```
power = 1  
while power <= N:  
    power *= 2
```

```
print(power)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

32

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

128

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.016s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

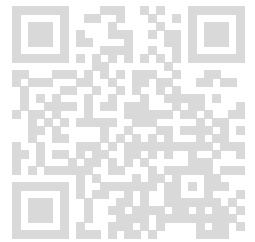
512

Compilation Status: Passed

Execution Time:

0.01s

161. Question:Given a floating point number with 1 decimal place

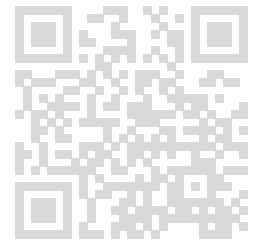


Mohammed (sinwanmohammed022@gmail.com)

round it off to nearest greater integer and print it.

Sample Input:2.6

Sample Output:3



Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
import math
```

```
n = float(input().strip())  
print(math.ceil(n))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

22

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

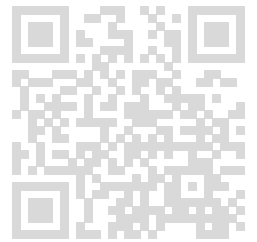
0.014s

TestCase5:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

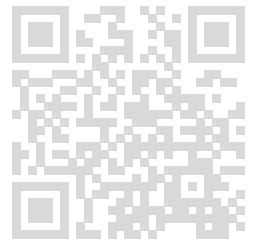
Output:

3

Compilation Status: Passed

Execution Time:

0.014s



162. Problem Statement: Given length L and breadth B of a farm, print the area of the farm upto 5 decimal decimals.

Sample Input: 1.626 2.31

Sample Output: 3.75606

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
from decimal import Decimal, ROUND_DOWN
L, B = map(Decimal, input().split())
area = L * B
# truncate to 5 decimal places
print(area.quantize(Decimal('0.00000'), rounding=ROUND_DOWN))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

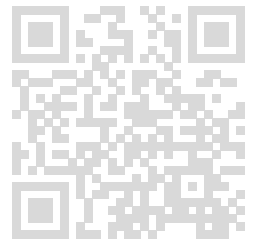
Output:

10.00000

Compilation Status: Passed

Execution Time:

0.019s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

17.20576

Compilation Status: Passed

Execution Time:

0.018s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

81.00000

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Mohammed (sinwanmohammed022@gmail.com)

0.00000

Compilation Status: Passed

Execution Time:

0.017s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

640.00000

Compilation Status: Passed

Execution Time:

0.018s

163. Problem Statement: Write a program to calculate the total surface area and volume of cuboid.

Input Description: Input contains three space separated positive integers L, B, H denoting the length, width and height of cuboid respectively.

Output Description: The output should be the total surface area and volume of the cuboid, separated by a space.

Sample Input: 1 2 3

Sample Output: 22 6

Completion Status: Completed

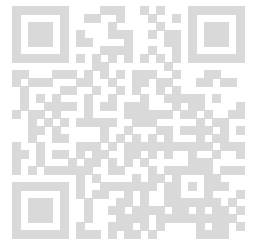
Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
# Read inputs
```



```
L, B, H = map(int, input().split())
```

```
# Calculate Total Surface Area and Volume
```

```
tsa = 2 * (L * B + B * H + L * H)
```

```
volume = L * B * H
```

```
# Print results
```

```
print(tsa, volume)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10 2

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

52 24

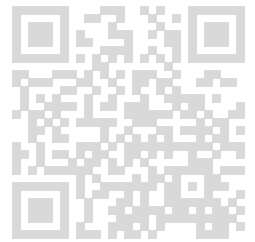
Compilation Status: Passed

Execution Time:

0.015s

TestCase3:

Input:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

24 8

Compilation Status: Passed

Execution Time:

0.015s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6 1

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

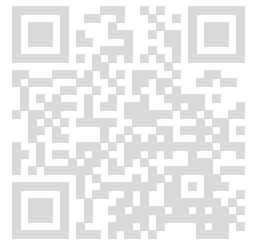
Output:

22 6

Compilation Status: Passed

Execution Time:

0.014s



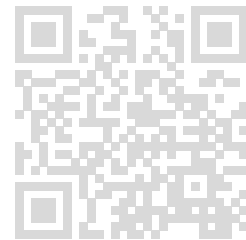
Mohammed (sinwanmohammed022@gmail.com)

164. Problem Statement: Given a number N, print its reverse.

Input Description: Input Size : $n \leq 1000$

Sample Input: 10

Sample Output: 1



Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
N = input().strip()
print(int(N[::-1]))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

62

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

87618

Compilation Status: Passed

Execution Time:

0.009s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

19

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

21

Compilation Status: Passed

Execution Time:

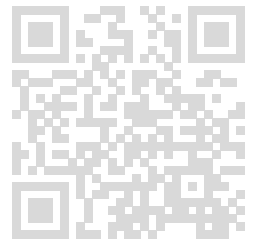
0.01s

TestCase5:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

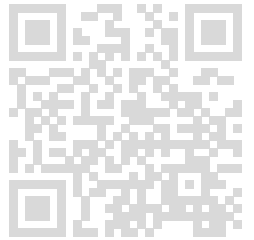
Output:

1

Compilation Status: Passed

Execution Time:

0.011s



165. Problem Statement: Given a number N followed by N elements which can be arranged in ascending order with maximum one element update. Print the index of the element which has to be changed else print '-1' if the updation not necessary or if the given input needs more than one update to form ascending order.

Sample Input: 71 2 4 3 5 6 851 10 3 14 5

Sample Output: 2-1

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
def find_index_to_update(arr):
```

```
    n = len(arr)
```

```
    violation = 0
```

```
    idx = -1
```

```
    for i in range(n - 1):
```

```
        if arr[i] >= arr[i + 1]:
```

```
            violation += 1
```

```
            idx = i
```

```
    if violation > 1:
```

```
        return -1
```

```
    if violation == 0:
```

```
        return -1
```

```
    # Check which element to update
```

```
    # Case 1: update arr[idx]
```

```
    if idx == 0 or arr[idx - 1] < arr[idx + 1]:
```



```
return idx
# Case 2: update arr[idx+1]
if idx + 2 >= n or arr[idx] < arr[idx + 2]:
return idx + 1

return -1
```

```
# Input handling
n = int(input().strip())
arr = list(map(int, input().split()))
print(find_index_to_update(arr))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

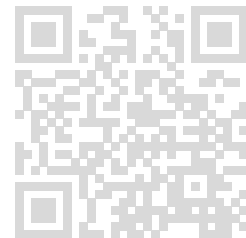
Output:

-1

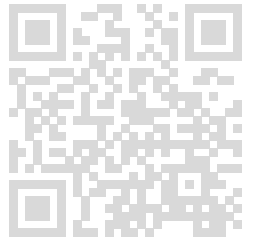
Compilation Status: Passed

Execution Time:

0.01s



Mohammed (sinwanmohammed022@gmail.com)



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.015s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

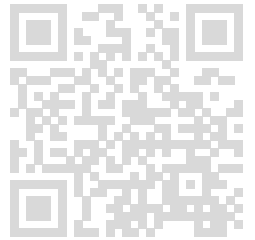
0

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.01s



166. Problem Statement: Given 3 numbers a,b,c print $a*b \bmod c$.

Sample Input: 5 3 2

Sample Output: 1

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
a, b, c = map(int, input().split())  
print((a * b) % c)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

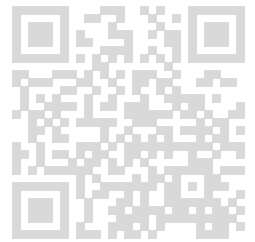
Execution Time:

0.013s

TestCase5:

Input:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

167. Problem Statement: Given a number N, print the product of the digits.

Input Description: Input Size : $N \leq 1000000000000$

Sample Input: 2143

Sample Output: 24

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
N = input().strip()

product = 1
for digit in N:
    product *= int(digit)

print(product)
```

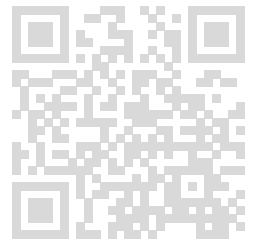
Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:



< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

256

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

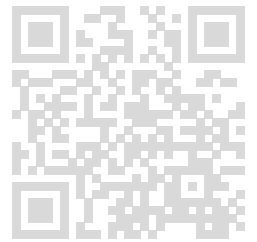
Execution Time:

0.013s

TestCase4:

Input:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

24

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.013s

168. Problem Statement: Given 3 numbers A,B,C find the sum of Arithmetic Series with $a=A$, $d=B$ and $n=C$

Sample Input: 1 1 2

Sample Output: 3

Completion Status: Completed

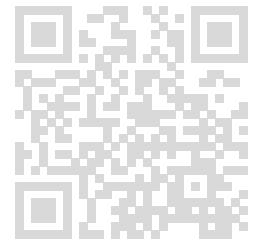
Concepts Included:

mathematics

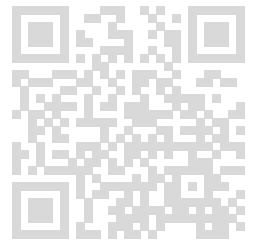
Language Used: PYTHON 3

Source Code:

```
a, d, n = map(int, input().split())
```



```
sum_series = n * (2 * a + (n - 1) * d) // 2
print(sum_series)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

84

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

108

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

243

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

13

Compilation Status: Passed

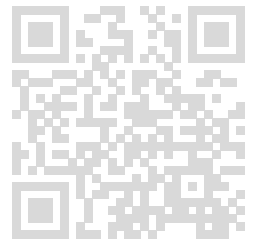
Execution Time:

0.014s

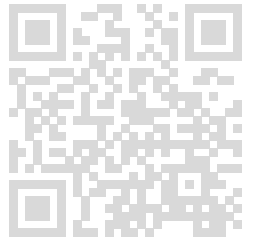
169. Problem Statement:Count the number of digits of a given number N.Size of the integer ranges from $1 < N < 100000000$

Sample Input:548

Sample Output:3



Mohammed (sinwanmohammed022@gmail.com)



Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
N = input().strip()
print(len(N))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.012s

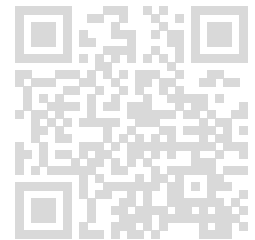
170. Problem Statement: Given a number N, find the nearest greater multiple of 10.

Input Description: Input Size : $N \leq 10000$

Sample Input: 3

Sample Output: 10

Completion Status: Completed



Mohammed (sinwanmohammed022@gmail.com)

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
N = int(input().strip())

# Strictly greater multiple of 10
nearest = ((N // 10) + 1) * 10
print(nearest)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

100

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

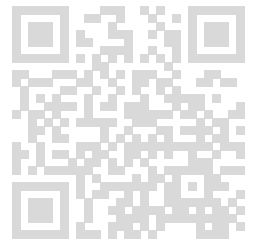
Output:

10

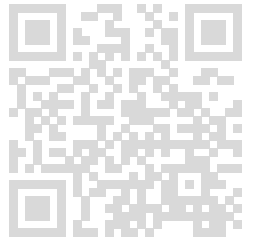
Compilation Status: Passed

Execution Time:

0.013s



Mohammed (sinwanmohammed022@gmail.com)



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

20

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

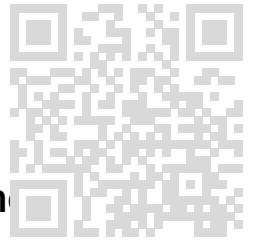
40

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.014s



171. Problem Statement: Given 2 numbers N,M. Find their difference and check whether it is even or odd.

Sample Input: 5 5

Sample Output: even

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
N, M = map(int, input().split())
```

```
diff = abs(N - M)
```

```
if diff % 2 == 0:  
    print("even")  
else:  
    print("odd")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

even

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

odd

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

even

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

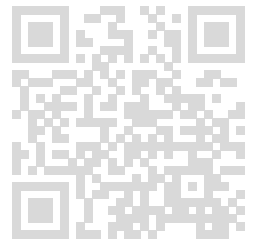
< hidden >

Output:

odd

Compilation Status: Passed

Execution Time:



Mohammed (sinwanmohammed022@gmail.com)

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

even

Compilation Status: Passed

Execution Time:

0.014s

172. Problem Statement: Given a number N followed by N elements, find the second smallest element. If it cannot be found then print -1

Input Description: Input Size : $N \leq 100000$ (ie do it in $O(\log n)$ time complexity)

Sample Input: 51 2 3 4 5

Sample Output: 2

Completion Status: Completed

Concepts Included:

array

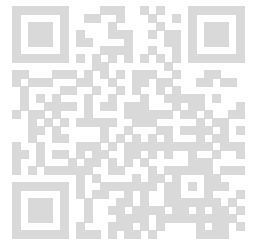
Language Used: PYTHON 3

Source Code:

```
N = int(input().strip())
arr = list(map(int, input().split()))
```

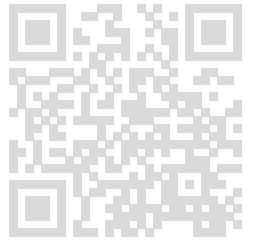
```
first = float('inf')
second = float('inf')
```

```
for num in arr:
    if num < first:
        second = first
        first = num
    elif first < num < second:
```



second = num

print(-1 if second == float('inf') else second)



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-5

Compilation Status: Passed

Execution Time:

0.012s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

5

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

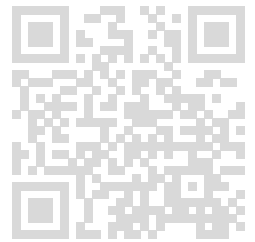
Compilation Status: Passed

Execution Time:

0.013s

173. Problem Statement: Given 2 numbers N and K followed by N elements, find the Kth smallest element. If the element cannot be found then print -1

Input Description: The input consists of two numbers N and K, followed by N



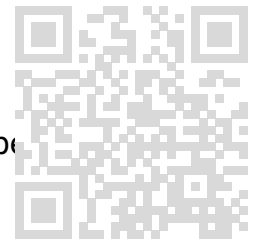
Mohammed (sinwanmohammed022@gmail.com)

elements. $N \leq 100000$.

Output Description: The output is the Kth smallest element. If the element cannot be found, print -1.

Sample Input: 5 21 1 2 4 5

Sample Output: 2



Completion Status: Completed

Concepts Included:

array

ABCO

Accolite

Amazon

Cisco

Hike

Microsoft

Snapdeal

VMWare

guvi-learning-path

Language Used: PYTHON 3

Source Code:

```
N, K = map(int, input().split())
arr = list(map(int, input().split()))
```

```
# Take distinct elements and sort
unique_arr = sorted(set(arr))
```

```
# Check if Kth element exists
if 1 <= K <= len(unique_arr):
    print(unique_arr[K-1])
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

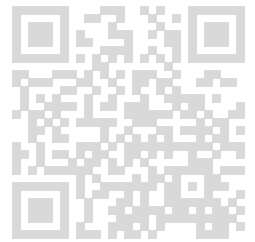
3

Compilation Status: Passed

Execution Time:

0.012s

TestCase4:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.013s

174. Problem Statement: Given a string 'S' and a character 'K', find at what position the character 'K' occurs for the first time in 'S'. (Assume the index of string starts at 1). If the character is not found in 'S' then print -1

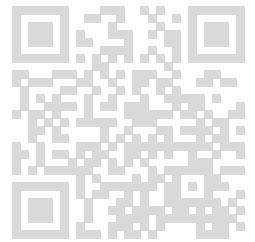
Input Description: Input Size : |s| <= 100000

Sample Input: codekata a

Sample Output: 6

Completion Status: Completed

Concepts Included:



strings

Language Used: PYTHON 3

Source Code:

```
S, K = input().split()
index = S.find(K) # 0-based index
print(index + 1 if index != -1 else -1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

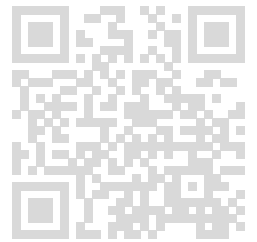
Output:

-1

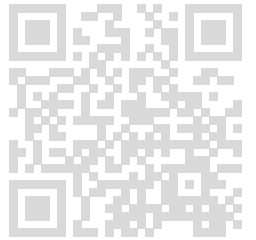
Compilation Status: Passed

Execution Time:

0.01s



Mohammed (sinwanmohammed022@gmail.com)



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.012s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

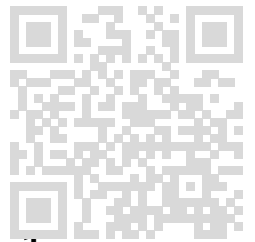
-1

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.013s



175. Problem Statement: Given a string 'S' and a character 'K', find how many times 'K' got repeated in 'S'. If 'K' is not found in 'S' print -1

Input Description: The input consists of a string 'S' and a character 'K'. The size of string 'S' is at most 100000.

Output Description: The output is the count of character 'K' in string 'S'. If 'K' is not found, print -1.

Sample Input: codekata a

Sample Output: 2

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
S, K = input().split()
count = S.count(K)
print(count if count != 0 else -1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.015s

TestCase4:

Input:

< hidden >

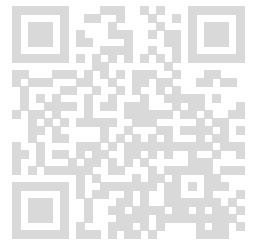
Expected Output:

< hidden >

Output:

1

Compilation Status: Passed



Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.01s

176. Problem Statement: Given a number N followed by N elements, if the number '0' occurs, print the proceeding numbers until the next '0' is encountered. If there are no balancing 0's, print -1.

Input Description: The input consists of an integer N , followed by N elements. N is constrained such that $1 < N \leq 100000$.

Output Description: Print the numbers between the first two occurrences of '0'. If there are no two '0's, print -1.

Sample Input: 101 1 1 0 1 0 1 1 0 1

Sample Output: 1 1 1

Completion Status: Not Completed

Concepts Included:

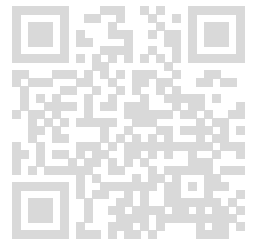
array

Language Used: PYTHON 3

Source Code:

```
N = int(input())
arr = list(map(int, input().split()))
```

```
started = False
```



```
result = []
```

```
for num in arr:  
    if num == 0 and not started:  
        started = True  
        continue  
    elif num == 0 and started:  
        break  
    elif started:  
        result.append(num)
```

```
if not result:  
    print(-1)  
else:  
    print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1

Compilation Status: Failed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

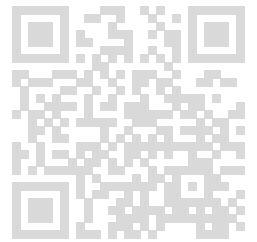
Expected Output:

< hidden >

Output:

1

Compilation Status: Failed



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Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Failed

Execution Time:

0.015s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1

Compilation Status: Passed

Execution Time:

0.016s

TestCase5:

Input:

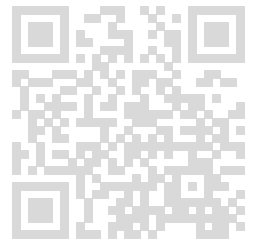
< hidden >

Expected Output:

< hidden >

Output:

-1

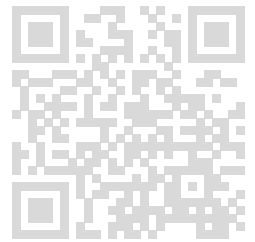


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Compilation Status: Passed

Execution Time:

0.013s



177. Problem Statement: Given a number N and an array of N elements, print all elements lesser than N in descending order. If no element found print -1.

Input Description: The input consists of a number N, and an array of N elements. N is between 1 and 10000 (inclusive).

Output Description: Print all elements from the array that are lesser than N, in descending order. If no such elements are found, print -1.

Sample Input: 52 14 15 14 3

Sample Output: 3 2

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
N = int(input())
arr = list(map(int, input().split()))

# Filter elements less than N
result = [x for x in arr if x < N]

# Check if any element found
if not result:
    print(-1)
else:
    # Sort in descending order
    result.sort(reverse=True)
    print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 1

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

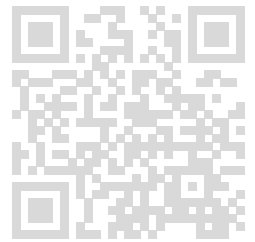
1

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:



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Input:

< hidden >

Expected Output:

< hidden >

Output:

2 1

Compilation Status: Passed

Execution Time:

0.012s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.013s

178. Problem Statement: Given 2 numbers N,K and an array of N elements, print the number(s) that has been repeated K times. Print them in ascending order if there are more than one number to be printed. If no element satisfies the pattern then print -1

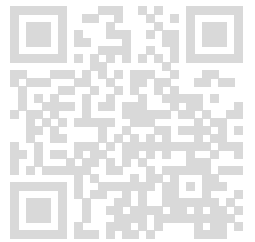
Input Description: The input consists of two integers N and K, followed by an array of N elements. N and K are up to 100000.

Output Description: Print the numbers that have been repeated K times in ascending order. If no such element exists, print -1.

Sample Input: 5 2 1 2 4 1 2

Sample Output: 1 2

Completion Status: Completed



Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
from collections import Counter
```

```
# Read input
```

```
N, K = map(int, input().split())
```

```
arr = list(map(int, input().split()))
```

```
# Count occurrences
```

```
count = Counter(arr)
```

```
# Collect numbers with exactly K occurrences
```

```
result = [num for num in count if count[num] == K]
```

```
if not result:
```

```
print(-1)
```

```
else:
```

```
print(*sorted(result))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

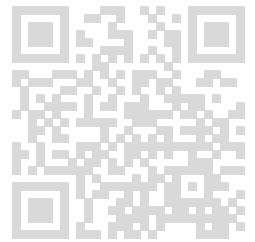
Execution Time:

0.016s

TestCase2:

Input:

< hidden >



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Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.015s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.015s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

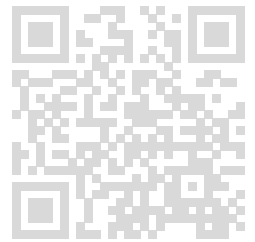
Output:

1

Compilation Status: Passed

Execution Time:

0.016s

TestCase5:**Input:**

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.017s

179. Problem Statement: Given a number N, find the factorial of N.

Input Description: The input consists of a single integer N, constrained by $1 \leq N \leq 25$.

Output Description: The output is the calculated factorial of N.

Sample Input: 5

Sample Output: 120

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
N = int(input())

factorial = 1
for i in range(1, N + 1):
    factorial *= i

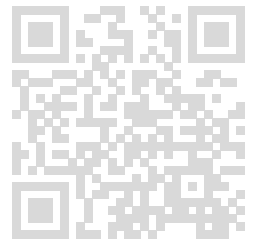
print(factorial)
```

Compilation Details:

TestCase1:

Input:

< hidden >



Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

720

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

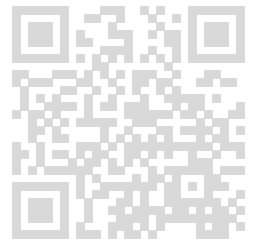
Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

6

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

24

Compilation Status: Passed

Execution Time:

0.013s

180. Problem Statement: Given a number N and an array of N elements, find the length of the longest repeating sequence of the elements. If no such sequence is found print -1

Input Description: The input consists of an integer N (where $N \leq 100000$) and an array of N elements.

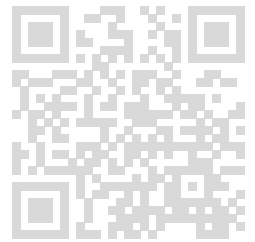
Sample Input: 8 1 2 2 2 3 4 5 6

Sample Output: 3

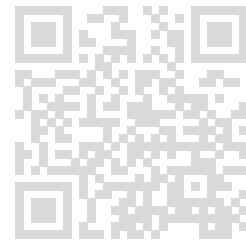
Completion Status: Completed

Concepts Included:

array



Language Used: PYTHON 3



Source Code:

```
N = int(input())
arr = list(map(int, input().split()))

if N == 0:
    print(-1)
    exit()

max_len = 1
curr_len = 1
found_repeat = False

for i in range(1, N):
    if arr[i] == arr[i-1]:
        curr_len += 1
        found_repeat = True
    if curr_len > max_len:
        max_len = curr_len
    else:
        curr_len = 1

print(max_len if found_repeat else -1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

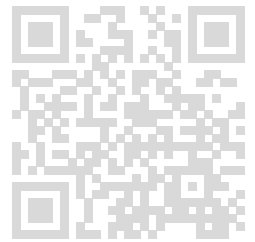
Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:**Input:**

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

181. Problem Statement: Given 2 numbers N,K print the array after deleting the last K elements.

Input Description: N,K ≤ 100000

Output Description: The array after deleting the last K elements.

Sample Input: 5 41 2 3 4 5

Sample Output: 1

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

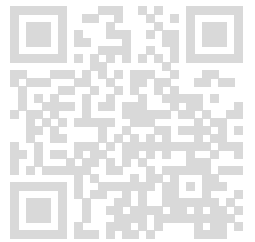
```
N, K = map(int, input().split())
arr = list(map(int, input().split()))
```

```
# Keep first N-K elements
result = arr[:N-K]
```

```
if result:
    print(*result)
else:
    print()
```

Compilation Details:

TestCase1:



Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 1 1

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

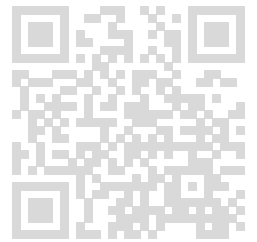
Output:

1

Compilation Status: Passed

Execution Time:

0.013s



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TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

11 14

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 3 4 5

Compilation Status: Passed

Execution Time:

0.014s

182. Problem Statement: Given a string two strings S1 and S2, remove characters from the S1 which are present in the S2. If S1 becomes empty then print -1

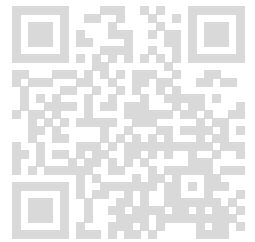
Input Description: Input Size : $N \leq 100000$

Sample Input: GUVI GEEK

Sample Output: UVI

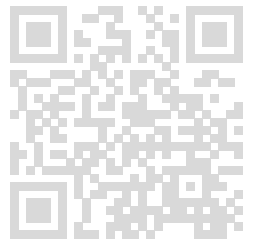
Completion Status: Completed

Concepts Included:



Mohammed (sinwanmohammed022@gmail.com)

strings



Language Used: PYTHON 3

Source Code:

```
S1, S2 = input().split()

# Store characters of S2 in a set for O(1) lookups
remove_set = set(S2)

# Build result by keeping only characters not in S2
result = "".join([ch for ch in S1 if ch not in remove_set])

# Print result or -1 if empty
print(result if result else -1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

valid

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

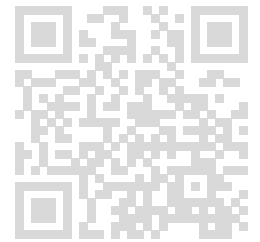
Output:

-1

Compilation Status: Passed

Execution Time:

0.013s

**TestCase3:****Input:**

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

Fh

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

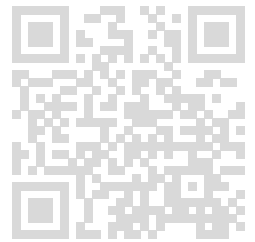
Output:

34

Compilation Status: Passed

Execution Time:

0.014s



183. Problem Statement: Given a number N followed by N elements for every 2 consecutive numbers print the maximum of the 2.

Input Description: The input consists of an integer N, followed by N elements. N is an integer such that $N \leq 100000$, implying an $O(n)$ time complexity solution is expected.

Output Description: The output is a space-separated sequence of the maximums of every two consecutive numbers from the input.

Sample Input: 51 1 3 0 5

Sample Output: 1 3 3 5

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
N = int(input())
arr = list(map(int, input().split()))

result = []
for i in range(N - 1):
    result.append(max(arr[i], arr[i + 1]))

print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4 4 4 4

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 3 4 5

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 1 5

Compilation Status: Passed

Execution Time:

0.013s

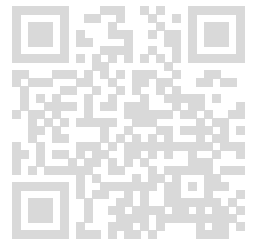
TestCase4:

Input:

< hidden >

Expected Output:

< hidden >



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Output:

3 3 4 5

Compilation Status: Passed**Execution Time:**

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

2 3 4 5

Compilation Status: Passed**Execution Time:**

0.014s

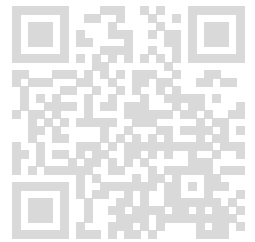
184. Problem Statement: Given an value 'M' followed by array of M elements in which the elements would have been rotated for certain 'N' times from the initial array representation where all elements are arranged in ascending order. Print the 'N' or print -1 if there is no rotation made or cannot be determined. Note: $1 \leq N \leq \text{length of the given array}$.

Sample Input: 5 15 18 2 3 6 12

Sample Output: 2

Completion Status: Completed**Concepts Included:**

array

Language Used: PYTHON 3**Source Code:**

```
M = int(input())
arr = list(map(int, input().split()))
```

```
# Find index of smallest element
min_index = arr.index(min(arr))
```

```
# If array is already sorted (no rotation)
if min_index == 0:
    print(-1)
else:
    print(min_index)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

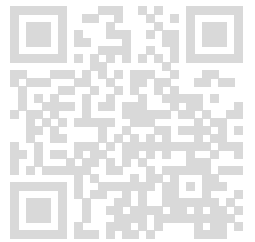
5

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.009s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

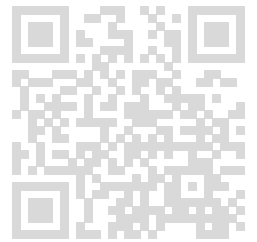
Output:

4

Compilation Status: Passed

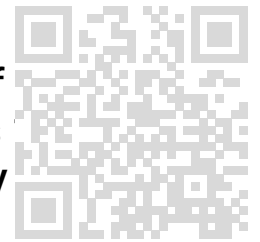
Execution Time:

0.014s



Mohammed (sinwanmohammed022@gmail.com)

185. Problem Statement: Given a number N,K followed by array of elements where the difference between any adjacent elements is 1. Find the position of the given number K. If K not found in the array print -1



Input Description: The input consists of two integers N and K, followed by an array of N elements where the difference between any adjacent elements is 1.

Output Description: The output is the position of the given number K. If K is not found in the array, print -1.

Sample Input: 5 13 2 1 2 3

Sample Output: 3

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
N, K = map(int, input().split())
arr = list(map(int, input().split()))
```

```
i = 0
pos = -1
while i < N:
    if arr[i] == K:
        pos = i + 1 # 1-based indexing
        break
    # Jump based on difference
    i += abs(arr[i] - K)
```

```
print(pos)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed**Execution Time:**

0.01s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed**Execution Time:**

0.014s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

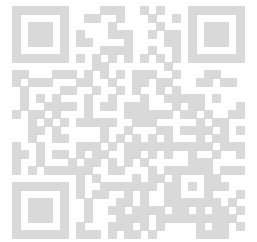
7

Compilation Status: Passed**Execution Time:**

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.01s

186. Problem Statement: Given an array of N elements which follows either even number or odd number series. There may exist at maximum 1 even number in the odd series or 1 odd number in the even series. Find the different number if exists otherwise print '-1'?

Input Description: Input Size : $|N| \leq 100000$

Sample Input: 51 3 4 5 7

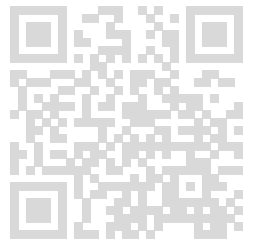
Sample Output: 4

Completion Status: Not Completed

Concepts Included:

array

Language Used: PYTHON 3



Source Code:

```
N = int(input().strip())
arr = list(map(int, input().split()))

# If fewer than 3 elements it's ambiguous per problem statement — return -1
if N < 3:
    print(-1)
    exit()

# Use the first three elements to determine the expected (majority) parity
a0, a1, a2 = arr[0], arr[1], arr[2]
if a0 % 2 == a1 % 2:
    expected = a0 % 2
elif a0 % 2 == a2 % 2:
    expected = a0 % 2
else:
    expected = a1 % 2

# Find the element that doesn't match expected parity
for x in arr:
    if x % 2 != expected:
        print(x)
        break
    else:
        print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

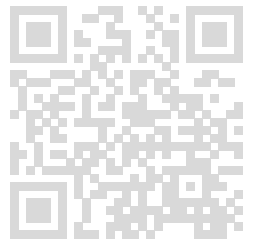
Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

8

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

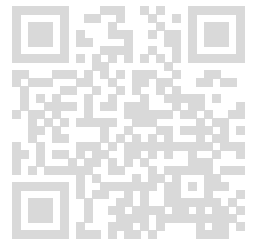
1

Compilation Status: Failed

Execution Time:

0.014s

TestCase5:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Failed

Execution Time:

0.014s

187. Problem Statement: Given an array of N elements, find the maximum length of increasing continuous sub-array. If it is not found print '-1'.

Input Description: Input Size : $N \leq 100000$

Output Description: The maximum length of the increasing continuous sub-array, or '-1' if not found.

Sample Input: 51 2 3 2 1

Sample Output: 3

Completion Status: Not Completed

Concepts Included:

array

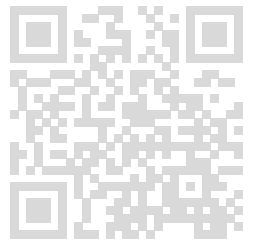
Language Used: PYTHON 3

Source Code:

```
N = int(input())
arr = list(map(int, input().split()))

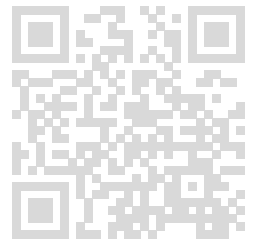
max_len = 1
curr_len = 1

for i in range(1, N):
    if arr[i] > arr[i - 1]:
        curr_len += 1
    max_len = max(max_len, curr_len)
else:
```



```
curr_len = 1
```

```
if max_len == 1:  
    print(-1)  
else:  
    print(max_len)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.015s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.012s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

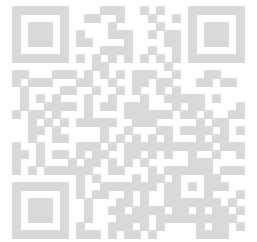
-1

Compilation Status: Failed

Execution Time:

0.014s

188. Problem Statement: Given 2 array of size N and M. merge them



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in sorted order and print it.

Input Description:The input consists of two integers N and M representing the sizes of the arrays, followed by N integers for the first array and M integers for the second array. The constraints are $|N| + |M| \leq 100000$.

Output Description:The output is the merged sorted array.

Sample Input:5 4 1 2 3 4 5 1 2 3 4

Sample Output:1 1 2 2 3 3 4 4 5

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
# Read input sizes
N, M = map(int, input().split())

# Read arrays
arr1 = list(map(int, input().split()))
arr2 = list(map(int, input().split()))

# Merge
merged = arr1 + arr2

# Sort
merged.sort()

# Print result
print(*merged)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:



1 2 3 4 5 6 7 8 9

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 2 2 3 3 4 4 5 5

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 2 2 3 3 4 5

Compilation Status: Passed

Execution Time:

0.012s

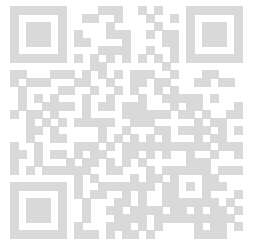
TestCase4:

Input:

< hidden >

Expected Output:

< hidden >



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Output:

0 2 3 5 5 5 5 5

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

0 1 1 2 2 3 4 4 5

Compilation Status: Passed

Execution Time:

0.014s

189. Problem Statement: Given an array, find the maximum difference between any two elements.

Input Description: Input Size : $N \leq 1000000$ (complexity $O(n)$ or $O(n \log n)$)

Sample Input: 51 2 3 4 5

Sample Output: 4

Completion Status: Completed

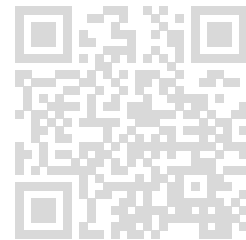
Concepts Included:

array

Language Used: PYTHON 3

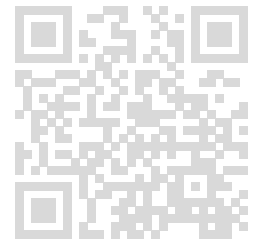
Source Code:

```
N = int(input())
arr = list(map(int, input().split()))
```



```
# Find max difference
max_diff = max(arr) - min(arr)

print(max_diff)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

3

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

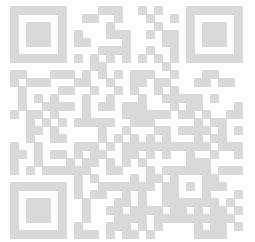
Execution Time:

0.014s

190. Problem Statement: Given an array, find the absolute minimum difference between any two elements in the array.

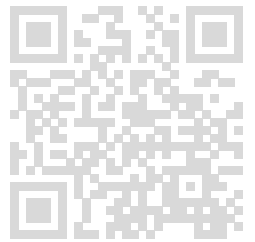
Input Description: Input Size : $N \leq 1000000$ (complexity $O(n)$ or $O(n \log n)$)

Sample Input: 50 2 3 4 5



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Sample Output:1



Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
N = int(input())
arr = list(map(int, input().split()))

# Sort the array
arr.sort()

# Initialize min_diff with a large number
min_diff = float('inf')

# Compare adjacent elements
for i in range(1, N):
    min_diff = min(min_diff, arr[i] - arr[i-1])

print(min_diff)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

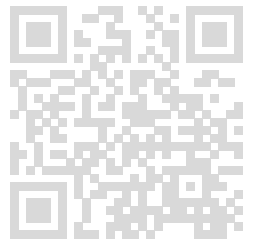
Output:

3

Compilation Status: Passed

Execution Time:

0.014s



Mohammed (sinwanmohammed022@gmail.com)

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.014s

191. Problem Statement: Given a number N and an array of N elements, find the maximum of the elements (using Bitwise AND) and print the output.

Input Description: Input Size N \leq 100000

Sample Input: 42 4 4 2

Sample Output: 4

Completion Status: Completed

Concepts Included:

bitwise

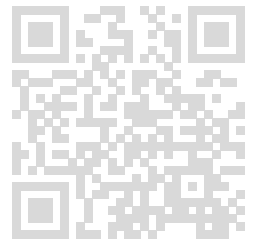
Language Used: PYTHON 3

Source Code:

```
N = int(input())
arr = list(map(int, input().split()))

# Initialize max_element as the first number
max_element = arr[0]

for num in arr[1:]:
    # Equivalent to normal comparison, but demonstrates bitwise usage
    if (num & max_element) == max_element and num != max_element:
        max_element = num
    elif num > max_element:
        max_element = num
```




```
print(max_element)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

99

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

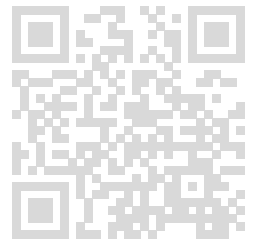
Input:

< hidden >

Expected Output:

< hidden >

Output:



Mohammed (sinwanmohammed022@gmail.com)

2

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

9

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

345

Compilation Status: Passed

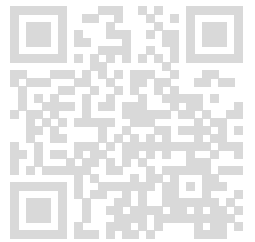
Execution Time:

0.014s

192. Problem Statement: Given a string S, print the reverse of the string.

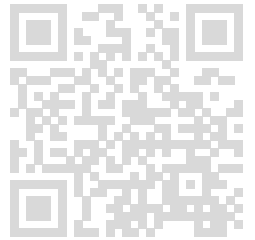
Input Description: Input Size : $|s| \leq 100000$ (ie do it in $O(n)$ or $O(\log n)$ time complexity)

Sample Input: codekata



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Sample Output:atakedoc



Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
S = input().strip()
print(S[::-1])
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

i

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

skeeg

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

654321

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

cba

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

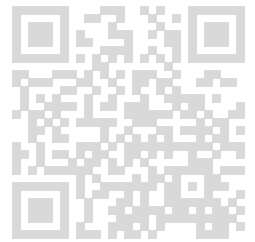
< hidden >

Expected Output:

< hidden >

Output:

a

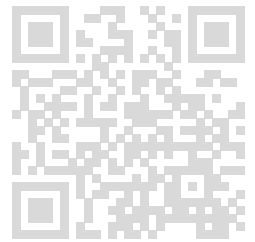


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Compilation Status: Passed

Execution Time:

0.014s



193. Problem Statement: Given a String S, print the number of unique characters in it. If all the characters are duplicated, then print -1.

Sample Input: GUVIGEEK

Sample Output: 4

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
S = input().strip()

# Count frequency of each character
from collections import Counter
freq = Counter(S)

# Collect characters that appear only once
unique_count = sum(1 for v in freq.values() if v == 1)

# Print result
print(unique_count if unique_count > 0 else -1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

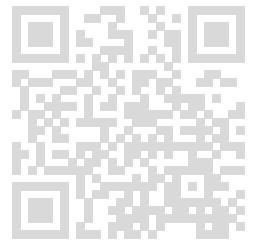
Output:

4

Compilation Status: Passed

Execution Time:

0.015s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.016s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.016s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Mohammed (sinwanmohammed022@gmail.com)

-1

Compilation Status: Passed

Execution Time:

0.017s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.016s

194. Problem Statement: Given a string S consisting of a sentence, the task is to reverse every word of the sentence except the first and last character of the words.

Input Description: The input consists of a string S representing a sentence.

Output Description: The output is the modified string with every word reversed except its first and last characters.

Sample Input: guvi coding platform

Sample Output: gvui cnidog proftalm.

Completion Status: Completed

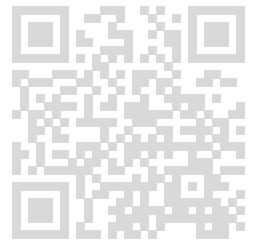
Concepts Included:

strings

array

Language Used: PYTHON 3

Source Code:



```
def transform_word(word):  
    if len(word) <= 2: # words with 1 or 2 letters remain unchanged  
        return word  
    return word[0] + word[1:-1][::-1] + word[-1]
```

```
S = input().strip()  
words = S.split()
```

```
result = [transform_word(word) for word in words]  
print(" ".join(result))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

i eoJny ctakedoa

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

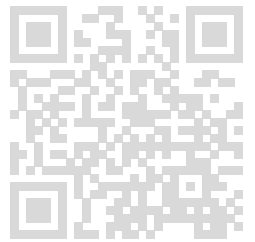
p c

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

cdoe

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

darocem

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

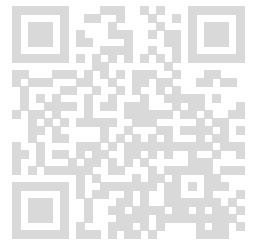
Output:

14325

Compilation Status: Passed

Execution Time:

0.013s



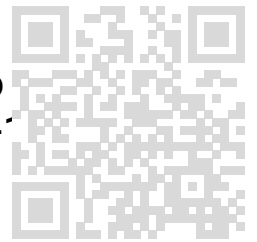
Mohammed (sinwanmohammed022@gmail.com)

195. Problem Statement: Given a roman numeral N, convert it into integer. Take L=50, C=100. If it is not a valid roman numeral print '-1'

Input Description: Input Size : $N \leq 100$

Sample Input: VIY

Sample Output: 6-1



Completion Status: Completed

Concepts Included:

strings

Amazon

Facebook

Microsoft

Twitter

Zoho

guvi-learning-path

Language Used: PYTHON 3

Source Code:

```
def roman_to_int(s):
    roman = {
        'I': 1,
        'V': 5,
        'X': 10,
        'L': 50,
        'C': 100
    }

    # check validity
    for ch in s:
        if ch not in roman:
            return -1

    total = 0
    i = 0
    while i < len(s):
        # If next numeral is larger, subtract current
        if i + 1 < len(s) and roman[s[i]] < roman[s[i + 1]]:
            total += roman[s[i + 1]] - roman[s[i]]
            i += 2
        else:
```

Mohammed (sinwanmohammed022@gmail.com)

```
total += roman[s[i]]  
i += 1
```

```
return total
```

```
# Input  
s = input().strip()  
print(roman_to_int(s))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

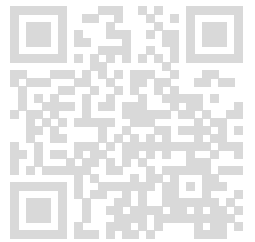
Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:



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< hidden >

Expected Output:

< hidden >

Output:

54

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

95

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

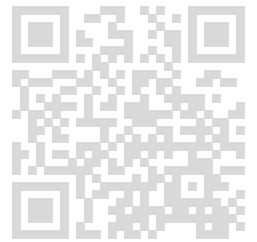
Output:

87

Compilation Status: Passed

Execution Time:

0.01s



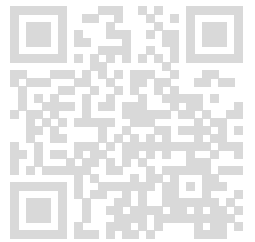
Mohammed (sinwanmohammed022@gmail.com)

196. Problem Statement: Given a string/sentence print its corresponding camelcase convention.

Input Description: Input Size : $|s| \leq 1000000$ (complexity $O(n)$)

Sample Input: guvi geeks

Sample Output: GuviGeeks



Completion Status: Not Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
# Input
s = input().strip()

# Split words, remove empty strings, capitalize each, join together
camel_case = ".join(word.capitalize() for word in s.split() if word)

print(camel_case)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

G

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Codekata

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Guviisforcoders

Compilation Status: Failed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

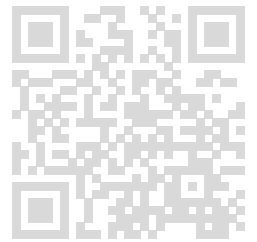
MicroArc

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

AlphaBeta

Compilation Status: Passed

Execution Time:

0.01s

197. Problem Statement: Given 2 strings check whether they differ exactly by one character. If yes then print 'yes' otherwise print 'no'

Input Description: Input Size : $|s| \leq 100000$ (complexity $O(n \log n)$ or $O(n)$)

Sample Input: codekata codekate

Sample Output: yes

Completion Status: Completed

Concepts Included:

strings

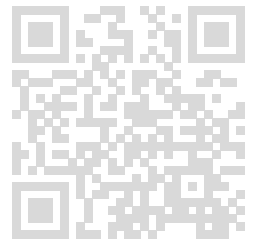
loop

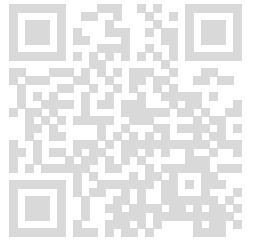
Language Used: PYTHON 3

Source Code:

```
s1, s2 = input().split()

# If lengths differ, they cannot differ by exactly one character
if len(s1) != len(s2):
    print("no")
else:
    # Count differences
    diff_count = sum(1 for a, b in zip(s1, s2) if a != b)
    print("yes" if diff_count == 1 else "no")
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

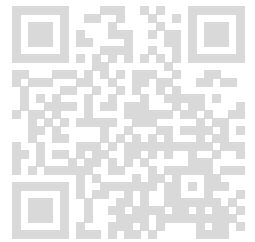
198. Problem Statement: Given two numbers N,K followed by an array of N elements, print the array after doing right shift K times (in cyclic manner).

Input Description: The input consists of two numbers N, K, followed by an array of N elements. Input Size: $1 \leq N, K \leq 100000$.

Output Description: The output is the array after performing a right cyclic shift K times.

Sample Input: 3 27 2 3

Sample Output: 2 3 7



Mohammed (sinwanmohammed022@gmail.com)

Completion Status: Completed

Concepts Included:

mathematics

array

Language Used: PYTHON 3

Source Code:

```
# Input
N, K = map(int, input().split())
arr = list(map(int, input().split()))

# Normalize K to avoid extra rotations
K %= N

# Perform right cyclic shift
shifted_arr = arr[-K:] + arr[:-K] if K != 0 else arr

print(*shifted_arr)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 1

Compilation Status: Passed

Execution Time:

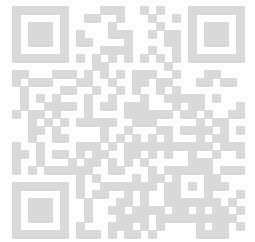
0.013s

TestCase2:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

2 1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4 5 1 2 3

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 4

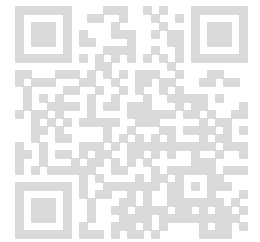
Compilation Status: Passed

Execution Time:

0.014s

199. Problem Statement: Given a number N, print the sum of the squares of its digits.

Input Description: The input consists of a number N, where $1 \leq N \leq$



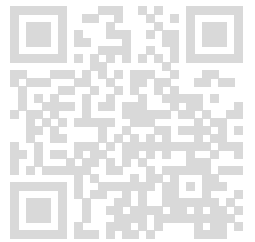
Mohammed (sinwanmohammed022@gmail.com)

10000000000000000000.

Output Description: The output is the sum of the squares of the digits of N.

Sample Input: 19

Sample Output: 82



Completion Status: Completed

Concepts Included:

mathematics

strings

Language Used: PYTHON 3

Source Code:

```
N = input().strip() # Read as string to handle very large numbers
```

```
# Sum the squares of each digit
sum_squares = sum(int(digit)**2 for digit in N)
```

```
print(sum_squares)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

90

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

20

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

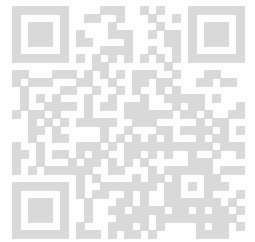
2

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

200. Problem Statement: Given a string S, print the reverse of the string after removing the vowels. If the resulting string is empty print '-1'.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: codekata

Sample Output: tkdc

Completion Status: Completed

Concepts Included:

strings

array

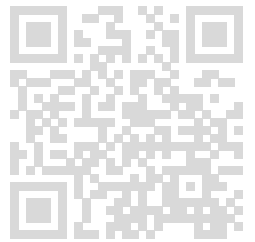
Language Used: PYTHON 3

Source Code:

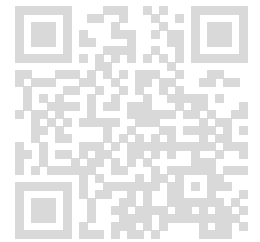
```
S = input().strip()
vowels = set('aeiouAEIOU')
```

```
# Remove vowels
filtered = [ch for ch in S if ch not in vowels]
```

```
# Check if empty
if not filtered:
    print(-1)
else:
    # Reverse and print
    print("".join(filtered[::-1]))
```



Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

mhtyhr

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

dctnrl

Compilation Status: Passed

Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

%!@4#

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

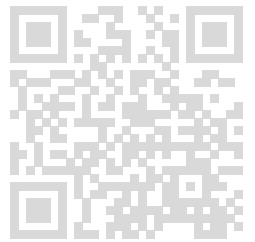
0.01s

201. Problem Statement: Given a string S, count the maximum number of times a character repeated in the string. If no character is repeated print '0'.

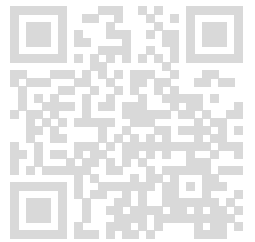
Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: codekata

Sample Output: 2



Completion Status: Completed



Concepts Included:

array

strings

Language Used: PYTHON 3

Source Code:

```
from collections import Counter
```

```
S = input().strip()
```

```
# Count frequency of each character  
freq = Counter(S)
```

```
# Find maximum repetition (ignore single occurrences)  
max_repeat = max(freq.values(), default=0)
```

```
# If max_repeat is 1 or less, print 0  
print(max_repeat if max_repeat > 1 else 0)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.016s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.016s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.012s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

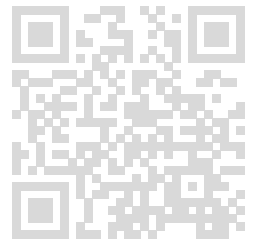
Output:

3

Compilation Status: Passed

Execution Time:

0.016s

TestCase5:**Input:**

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< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.012s

202. Problem Statement: Given a number N and an array of N elements, every number is repeated except for one. Print that one number.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: 101 2 3 2 3 3 2 5 5 2

Sample Output: 1

Completion Status: Not Completed

Concepts Included:

mathematics

array

algorithm

Language Used: PYTHON 3

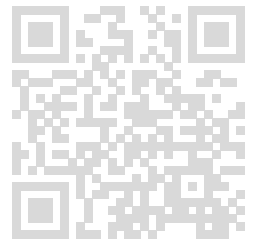
Source Code:

```
from collections import Counter
```

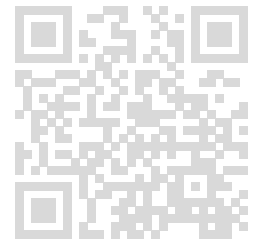
```
N = int(input())  
arr = list(map(int, input().split()))
```

```
count = Counter(arr)
```

```
# Find the element with count 1  
for num, freq in count.items():  
    if freq == 1:  
        print(num)  
        break
```



Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.016s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.016s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

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Execution Time:

0.017s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Failed

Execution Time:

0.017s

203. Problem Statement: Given two numbers L,R print the smallest number which is divisible by both L and R.

Input Description: The input consists of two numbers L and R, where $1 \leq L, R \leq 100000$.

Output Description: The output is the smallest number which is divisible by both L and R.

Sample Input: 10 130

Sample Output: 130

Completion Status: Completed

Concepts Included:

mathematics

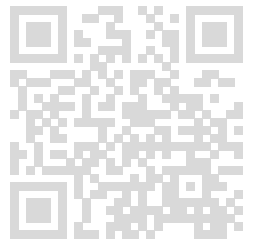
array

Language Used: PYTHON 3

Source Code:

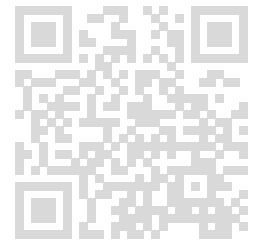
```
import math
```

```
L, R = map(int, input().split())
```



```
# LCM formula: lcm(a,b) = abs(a*b) // gcd(a,b)
lcm = abs(L * R) // math.gcd(L, R)

print(lcm)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

60

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

810

Compilation Status: Passed

Execution Time:

0.015s

TestCase3:

Input:

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

792

Compilation Status: Passed

Execution Time:

0.014s

204. Problem Statement: Given a number N and an array of N strings, find the number of strings that are an anagram of 'kabali'. If there exists no anagram for the given string print '0'.

Input Description: The input consists of an integer N, representing the number of strings, followed by N strings. Constraints: $1 \leq N \leq 1000$

Output Description: The output is a single integer representing the count of strings that are an anagram of 'kabali', or '0' if no such anagram exists.

Sample Input: 5kabalikaablikababakabkabail

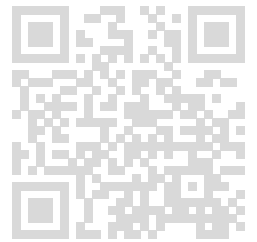
Sample Output: 3

Completion Status: Completed

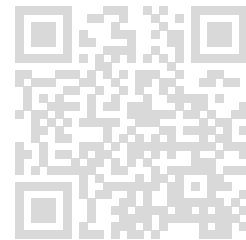
Concepts Included:

array

strings



Language Used: PYTHON 3



Source Code:

```
from collections import Counter
```

```
N = int(input())  
words = [input().strip() for _ in range(N)]
```

```
target = "kabali"  
target_count = Counter(target)
```

```
# Count anagrams  
count = sum(1 for word in words if Counter(word) == target_count)
```

```
print(count)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.017s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.017s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.012s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.016s

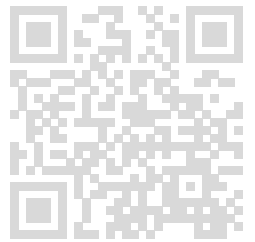
205. Problem Statement: Given a number N, print their prime factors in sorted order.

Input Description: The input consists of a number N, where $2 \leq N \leq 100000$.

Sample Input: 18

Sample Output: 2 3

Completion Status: Not Completed

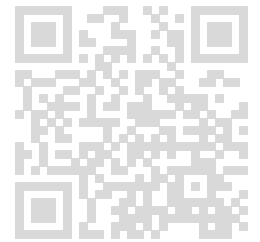


Concepts Included:

algorithm

array

mathematics



Language Used: PYTHON 3

Source Code:

```
N = int(input())
factors = set()

n = N
# Check for factor 2
if n % 2 == 0:
    factors.add(2)
    while n % 2 == 0:
        n //= 2

# Check for odd factors from 3 onwards
i = 3
while i * i <= n:
    if n % i == 0:
        factors.add(i)
        while n % i == 0:
            n //= i
        i += 2

# If remaining n > 1, it's a prime
if n > 1:
    factors.add(n)

# Print sorted prime factors
print(*sorted(factors))
```

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Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

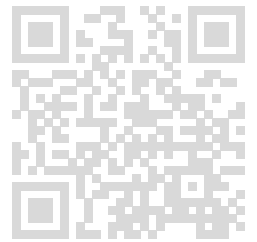
Output:

5

Compilation Status: Passed

Execution Time:

0.014s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 3

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 5

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Mohammed (sinwanmohammed022@gmail.com)

19

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3 5 7

Compilation Status: Failed

Execution Time:

0.013s

206. Problem Statement: Given 3 points check whether they lie on the same line. If they lie on the same line print 'yes' Otherwise print 'no'.

Sample Input: 0 10 00 2

Sample Output: yes

Completion Status: Not Completed

Concepts Included:

mathematics

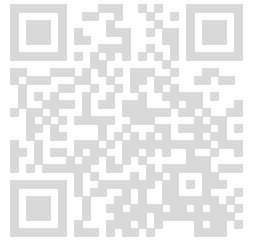
array

algorithm

Language Used: PYTHON 3

Source Code:

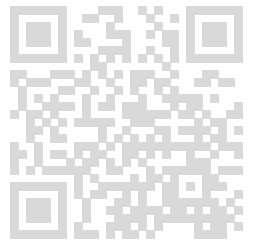
```
# Read 3 points
x1, y1 = map(int, input().split())
```



```
x2, y2 = map(int, input().split())
x3, y3 = map(int, input().split())

# Check collinearity using area formula
area = x1*(y2 - y3) + x2*(y3 - y1) + x3*(y1 - y2)

if area == 0:
    print("yes")
else:
    print("no")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Failed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

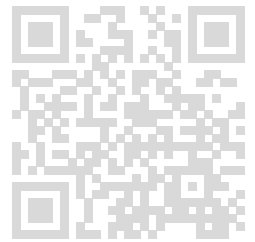
Output:

no

Compilation Status: Passed

Execution Time:

0.01s



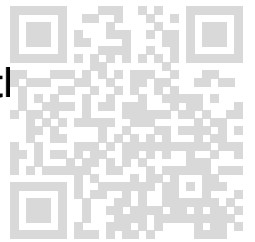
Mohammed (sinwanmohammed022@gmail.com)

207. Problem Statement: Given a number N and a number K, find the greatest number which divides both.

Input Description: N and K \leq 100000

Sample Input: 5 10

Sample Output: 5



Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
import math
```

```
N, K = map(int, input().split())
```

```
# Find GCD
print(math.gcd(N, K))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

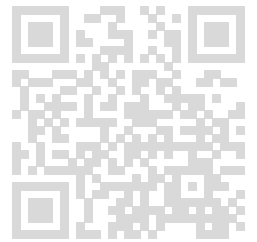
1

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

12

Compilation Status: Passed

Execution Time:

0.014s

208. Problem Statement: Given a number N and K followed by N elements and K elements. Now insert the given K elements one by one into the array and print the maximum in the array after each insertion .

Input Description: Input Size : $K \leq N \leq 10000$ (read about priority queues and implement)

Sample Input: 5 21 2 3 4 55 4

Sample Output: 5 5

Completion Status: Not Completed

Concepts Included:

array

data structures

algorithm

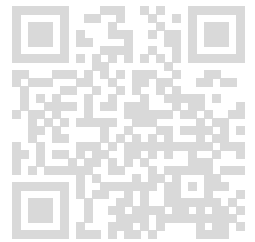
Language Used: PYTHON 3

Source Code:

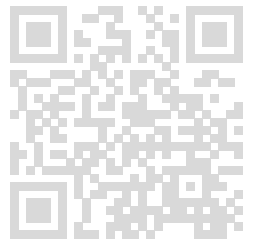
```
N, K = map(int, input().split())
arr = list(map(int, input().split()))
insertions = list(map(int, input().split()))
```

```
current_max = max(arr)
```

```
for x in insertions:
    arr.append(x)
```



```
current_max = max(current_max, x)
print(current_max, end=" ")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 5

Compilation Status: Failed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 5

Compilation Status: Failed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Mohammed (sinwanmohammed022@gmail.com)

10 20 20

Compilation Status: Failed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 6

Compilation Status: Failed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 10

Compilation Status: Failed

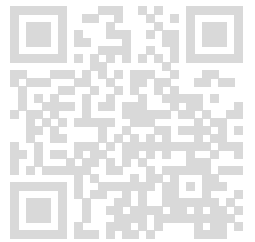
Execution Time:

0.01s

209. Problem Statement: Given a string S. Validate if a given string is numeric. print 'yes' if it is a numeric otherwise print 'no'.

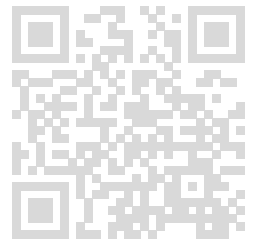
Sample Input: guvigeeks

Sample Output: no



Mohammed (sinwanmohammed022@gmail.com)

Completion Status: Completed



Concepts Included:

mathematics

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
```

```
if s.isnumeric():  
    print("yes")  
else:  
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

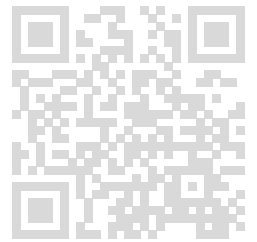
Output:

no

Compilation Status: Passed

Execution Time:

0.014s



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

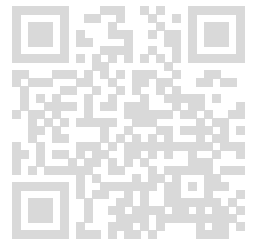
Mohammed (sinwanmohammed022@gmail.com)

no

Compilation Status: Passed

Execution Time:

0.014s



210. Problem Statement: Given an array of N strings sort it in ascending order based on the length of the string. If two strings are found to have the same length sort them in lexicographical order.

Sample Input: 3 coding platform codekata

Sample Output: coding codekata platform

Completion Status: Completed

Concepts Included:

algorithm

Language Used: PYTHON 3

Source Code:

```
N = int(input())
words = input().split()

# Sort by length first, then lexicographically
words.sort(key=lambda x: (len(x), x))

print(*words)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

aa ab aac

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

aa aac aba

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

ab aac aaaa

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

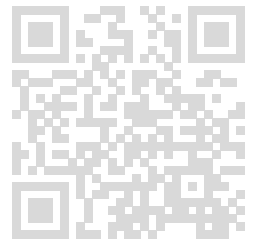
< hidden >

Expected Output:

< hidden >

Output:

aa

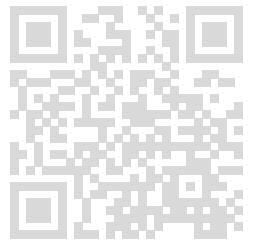


Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.014s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

a b c

Compilation Status: Passed

Execution Time:

0.013s

211. Problem Statement: Given a sentence S take out the extra spaces. If no extra space is present print the same as output.

Input Description: Input Size : |s| ≤ 100000 (complexity O(n))

Sample Input: codekata challenge

Sample Output: codekata challenge

Completion Status: Completed

Concepts Included:

array

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()
```

```
# Split by spaces and join to remove extra spaces  
cleaned = ''.join(s.split())
```



```
print(cleaned)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

coding platform

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

guvi geeks

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

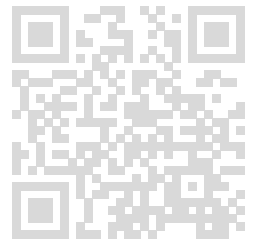
Input:

< hidden >

Expected Output:

< hidden >

Output:



Mohammed (sinwanmohammed022@gmail.com)

aaa BBB

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

a a v

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

aa bb cc

Compilation Status: Passed

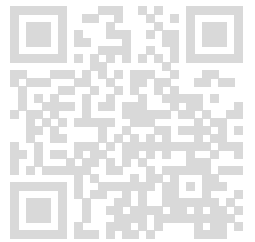
Execution Time:

0.014s

212. Problem Statement: Given a string S change upper case to lowercase and lowercase to uppercase.

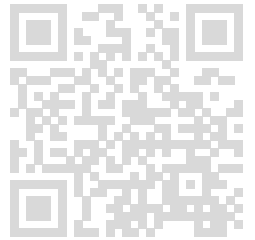
Input Description: The input consists of a string S with size $|s| \leq 10000000$ (complexity $O(n)$).

Sample Input: CodEkaTa



Mohammed (sinwanmohammed022@gmail.com)

Sample Output:cODeKAtA



Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()

# Swap case for each character
print(s.swapcase())
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

ABCD

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

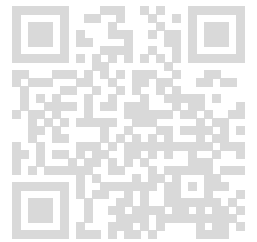
Output:

AAAA

Compilation Status: Passed

Execution Time:

0.013s



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

BABA

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

aABc

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

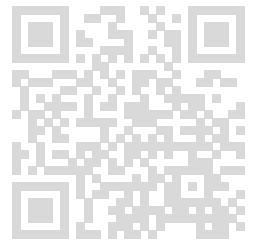
Mohammed (sinwanmohammed022@gmail.com)

aabb

Compilation Status: Passed

Execution Time:

0.01s



213. Problem Statement: Given a string/sentence remove all the spaces and print the result.

Input Description: Input Size : $|s| \leq 1000000$ (complexity $O(n)$)

Sample Input: guvi geeks

Sample Output: guvigeeks

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()

# Remove all spaces
result = s.replace(" ", "")

print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

AabXxy

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

AbCd

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

AaaBbb

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

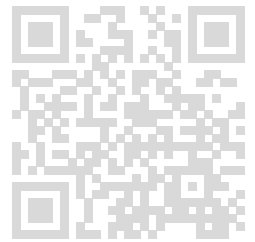
< hidden >

Expected Output:

< hidden >

Output:

aabc

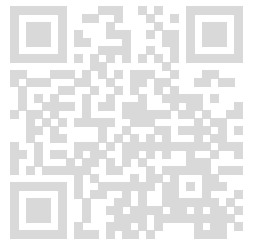


Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Passed

Execution Time:

0.014s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

aabb

Compilation Status: Passed

Execution Time:

0.014s

214. Problem Statement: Given a range (i.e) two numbers L and R count the number of perfect squares within the range (inclusive of L and R). If no perfect square exists within the range print '-1'.

Input Description: The input consists of two integers L and R, representing the range, where $L \leq R \leq 100000$.

Output Description: The output is an integer representing the count of perfect squares within the range [L, R], or -1 if none exist.

Sample Input: 2 10

Sample Output: 2

Completion Status: Completed

Concepts Included:

mathematics

array

Language Used: PYTHON 3

Source Code:

```
import math
```

```
L, R = map(int, input().split())
```

```
# Count of perfect squares in range [L, R]
```

```
count = math.floor(math.sqrt(R)) - math.ceil(math.sqrt(L)) + 1
```

```
if count <= 0:
```

```
    print(-1)
```

```
else:
```

```
    print(count)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

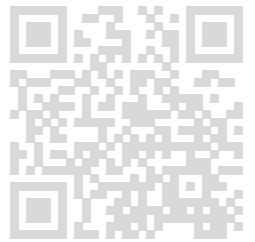
2

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

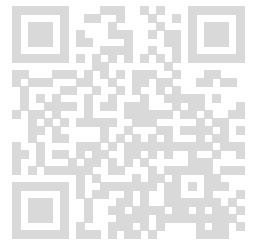
Output:

1

Compilation Status: Passed

Execution Time:

0.014s



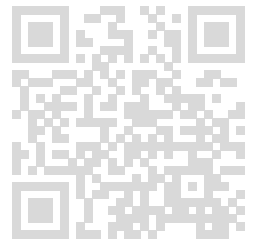
Mohammed (sinwanmohammed022@gmail.com)

215. Problem Statement: Given 2 strings and a number K, check whether they differ exactly by K characters.

Input Description: Input Size : $|s| \leq 100000$ (complexity $O(n \log n)$ or $O(n)$)

Sample Input: codekata codeguvi 4

Sample Output: yes



Completion Status: Completed

Concepts Included:

array

strings

Language Used: PYTHON 3

Source Code:

```
s1, s2, k = input().split()
k = int(k)

# Strings must have the same length
if len(s1) != len(s2):
    print("no")
else:
    diff = sum(1 for a, b in zip(s1, s2) if a != b)
    print("yes" if diff == k else "no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

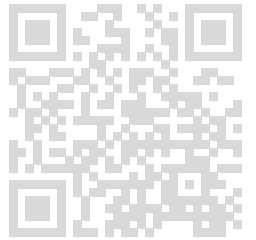
Output:

no

Compilation Status: Passed

Execution Time:

0.01s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

216. Problem Statement: Given a string S consisting of only '(' and ')', print 'yes' if it is balanced otherwise print 'no'.

Sample Input: (())

Sample Output: yes

Completion Status: Completed

Concepts Included:

strings

array

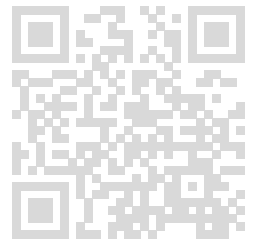
data structures

Language Used: PYTHON 3

Source Code:

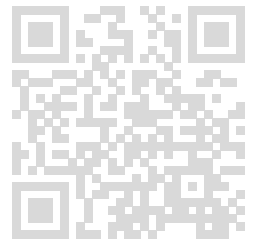
```
s = input().strip()
```

```
balance = 0
for ch in s:
    if ch == '(':
        balance += 1
    elif ch == ')':
        balance -= 1
    if balance < 0:
```



break # closing before opening ☒ unbalanced

print("yes" if balance == 0 else "no")



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Output:

no

Compilation Status: Passed**Execution Time:**

0.015s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed**Execution Time:**

0.014s

217. Problem Statement: Given 2 numbers N,K followed by a sorted array of N elements, search and tell if an element K is present in the array. print 'yes' if element is present otherwise print 'no'.

Input Description: Input Size : $1 \leq N \leq 10000000000000000$ (Do it in $\log N$ time complexity)

Output Description: print 'yes' if element is present otherwise print 'no'.

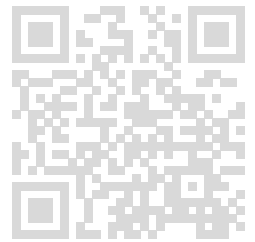
Sample Input: 3 22 3 7

Sample Output: Yes

Completion Status: Completed**Concepts Included:**

algorithm

array

Language Used: PYTHON 3

Source Code:

```
N, K = map(int, input().split())
arr = list(map(int, input().split()))
```

```
# Binary Search
low, high = 0, N - 1
found = False
```

```
while low <= high:
    mid = (low + high) // 2
    if arr[mid] == K:
        found = True
        break
    elif arr[mid] < K:
        low = mid + 1
    else:
        high = mid - 1
```

```
print("yes" if found else "no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

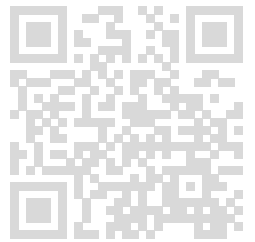
Input:

< hidden >

Expected Output:

< hidden >

Output:



Mohammed (sinwanmohammed022@gmail.com)

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

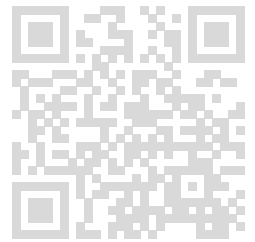
0.014s

218. Problem Statement: Given 2 numbers N and K. Print the number of occurrences of K in N. If K is not found print '-1'.

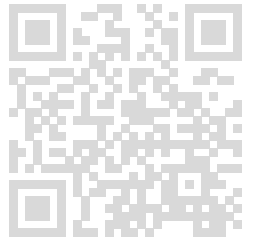
Input Description: $1 \leq N \leq 100000$, $0 \leq K \leq 9$

Sample Input: 1000 0

Sample Output: 3



Mohammed (sinwanmohammed022@gmail.com)



Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
N, K = input().split()
count = N.count(K)

print(count if count > 0 else -1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.014s

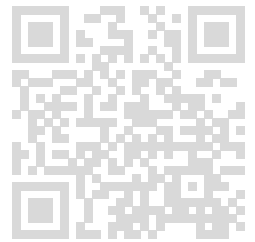
219. Problem Statement: Given a string S, print the 1st and 3rd character of the string (chracter index starts from 1).

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: codekata

Sample Output: cd

Completion Status: Completed



Concepts Included:

strings

Language Used: PYTHON 3

Source Code:

```
s = input().strip()

# 1st character -> index 0, 3rd character -> index 2
print(s[0] + s[2])
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

gv

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

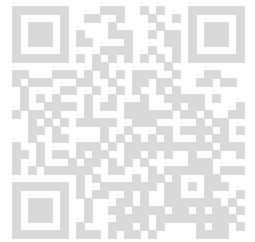
Output:

vr

Compilation Status: Passed

Execution Time:

0.014s



Mohammed (sinwanmohammed022@gmail.com)

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

02

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

gv

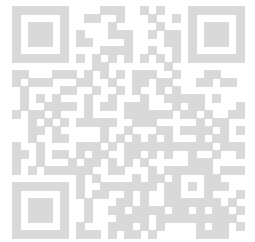
Compilation Status: Passed

Execution Time:

0.013s

220. Problem Statement: Vishal is learning to skate on ice. He's a beginner, so his only mode of transportation is pushing off from a snow drift to the north, east, south or west and sliding until he lands in another snow drift. He has noticed that in this way it's impossible to get from some snow drifts to some other by any sequence of moves. He now wants to heap up some additional snow drifts, so that he can get from any snow drift to any other one. He asked you to find the minimal number of snow drifts that need to be created. We assume that Vishal can only heap up snow drifts at integer coordinates.

Input Description: The first line of input contains a single integer N the number of snow drifts. Each of the following n lines contains two integers x_i and y_i the



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coordinates of the i -th snow drift. Note that the north direction coincides with the direction of Oy axis, so the east direction coincides with the direction of the Ox axis. All snow drift's locations are distinct. Input Size : $1 \leq N, X_i, Y_i \leq 1000$

Output Description: The minimal number of snow drifts that need to be created.

Sample Input: 22 11 2

Sample Output: 1

Completion Status: Completed

Concepts Included:

trees and graphs

mathematics

array

Language Used: PYTHON 3

Source Code:

```
N = int(input())
points = [tuple(map(int, input().split())) for _ in range(N)]

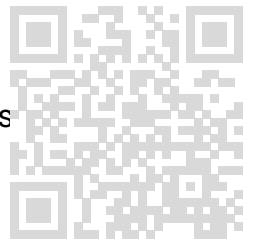
# Build graph: connect points if they share same row or column
adj = [[] for _ in range(N)]
for i in range(N):
    for j in range(i+1, N):
        if points[i][0] == points[j][0] or points[i][1] == points[j][1]:
            adj[i].append(j)
            adj[j].append(i)

# DFS to count connected components
visited = [False]*N

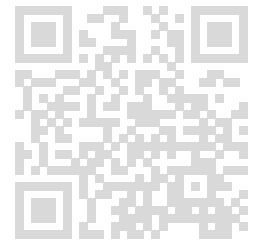
def dfs(u):
    visited[u] = True
    for v in adj[u]:
        if not visited[v]:
            dfs(v)

components = 0
for i in range(N):
    if not visited[i]:
        dfs(i)
        components += 1

# Minimum snow drifts to add = components - 1
print(components - 1)
```



Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

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Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.01s

221. Problem Statement: Given a number N, print the even factors of N. If the even factor does not exist for N print '-1'.

Input Description: Input Size : $1 \leq N \leq 1000$

Sample Input: 8

Sample Output: 2 4 8

Completion Status: Not Completed

Concepts Included:

mathematics

array

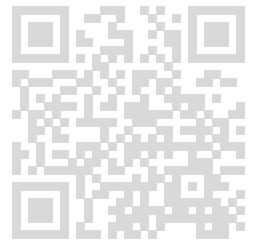
Language Used: PYTHON 3

Source Code:

```
N = int(input())
```

```
even_factors = [i for i in range(1, N + 1) if N % i == 0 and i % 2 == 0]
```

```
if even_factors:  
    print(*even_factors)  
else:
```



print(-1)

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

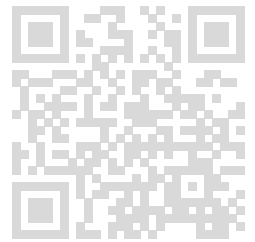
Input:

< hidden >

Expected Output:

< hidden >

Output:



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2 4 8 10 20 40

Compilation Status: Failed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 10

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

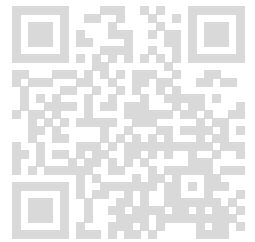
Compilation Status: Passed

Execution Time:

0.01s

222. Problem Statement: Given a number N, print the distinct pairs formed by multiplying two prime numbers (i.e) prime x prime should yield the N. Also print the numbers in descending order. If no such pairs can be formed print '-1'.

Input Description: The input consists of a single integer N, where $1 \leq N \leq 100000$.

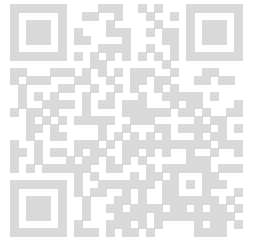


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Output Description: Print the distinct pairs of prime numbers (prime x prime = N) in descending order. If no such pairs can be formed, print '-1'.

Sample Input: 65

Sample Output: 13 5



Completion Status: Completed

Concepts Included:

array

mathematics

Language Used: PYTHON 3

Source Code:

```
import math

# Function to check if a number is prime
def is_prime(num):
    if num < 2:
        return False
    for i in range(2, int(math.isqrt(num)) + 1):
        if num % i == 0:
            return False
    return True

N = int(input())

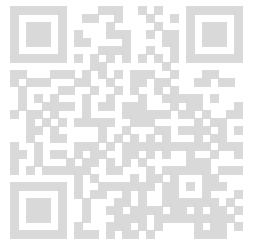
pairs = []

# Check all numbers from 2 to N
for i in range(2, N + 1):
    if N % i == 0:
        j = N // i
        if is_prime(i) and is_prime(j) and i <= j:
            pairs.append((max(i, j), min(i, j)))

# Remove duplicates and sort descending
pairs = list(set(pairs))
pairs.sort(reverse=True)

if pairs:
    for a, b in pairs:
        print(a, b)
else:
    print(-1)
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

13 3

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5 5

Compilation Status: Passed

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Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

13 5

Compilation Status: Passed

Execution Time:

0.014s

223. Problem Statement: Given a number N , check if it is a power of 2.

Input Description: The input consists of a number N , where $1 \leq N \leq 100000$.

Output Description: Print 'yes' if N is a power of 2, otherwise print 'no'.

Sample Input: 64

Sample Output: yes

Completion Status: Completed

Concepts Included:

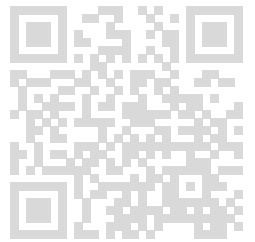
mathematics

Language Used: PYTHON 3

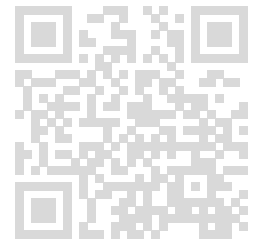
Source Code:

```
N = int(input())

# Check if N is a power of 2 using bitwise AND trick
if N > 0 and (N & (N - 1)) == 0:
    print("yes")
else:
    print("no")
```



Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

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Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

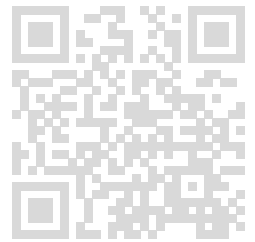
0.013s

224. Problem Statement: Given 2 numbers N and K. check if N is a power of K. Print 'yes' if it is a power of k otherwise print 'no'.

Sample Input: 64 8

Sample Output: yes

Completion Status: Completed



Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
N, K = map(int, input().split())
```

```
if K == 1:  
    # Only 1^x can be 1  
    print("yes" if N == 1 else "no")  
else:  
    temp = N  
    while temp > 1:  
        if temp % K != 0:  
            print("no")  
            break  
        temp //= K  
    else:  
        print("yes")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

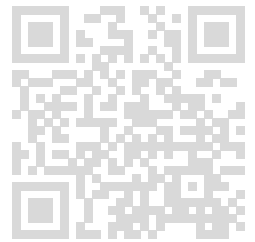
TestCase2:

Input:

< hidden >

Expected Output:

< hidden >



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Output:

no

Compilation Status: Passed**Execution Time:**

0.013s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed**Execution Time:**

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

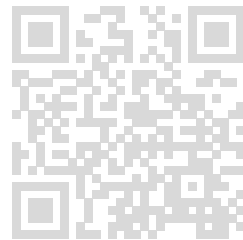
yes

Compilation Status: Passed**Execution Time:**

0.01s

225. Problem Statement:Given a number N, followed by an array of N elements,print 'yes' if it is a sorted array(either ascending or descending)otherwise print 'no'.

Input Description:The input consists of a number N, followed by an array of N



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elements. N is between 1 and 100000.

Output Description: The output is 'yes' if the given array is sorted (either ascending or descending), otherwise 'no'.

Sample Input: 32 3 7

Sample Output: yes

Completion Status: Completed

Concepts Included:

algorithm

array

Language Used: PYTHON 3

Source Code:

```
N = int(input())
arr = list(map(int, input().split()))

if arr == sorted(arr) or arr == sorted(arr, reverse=True):
    print("yes")
else:
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

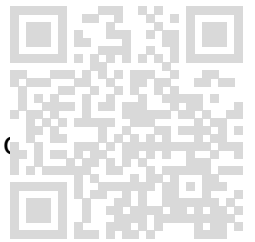
yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:



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Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

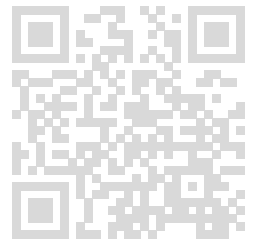
Output:

yes

Compilation Status: Passed

Execution Time:

0.013s



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TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.013s

226. Problem Statement: Given 2 numbers P and A which are the perimeter and area of a rectangle respectively, find if there can actually be a rectangle with this perimeter and area having integer sides. If there exists such rectangle print 'yes' otherwise print 'no'.

Input Description: Input Size : $1 \leq P, A \leq 100000$

Output Description: The output is 'yes' if such a rectangle exists, otherwise 'no'.

Sample Input: 20 25

Sample Output: yes

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

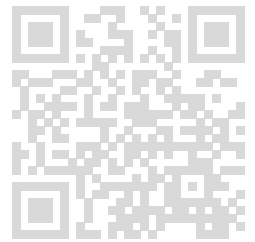
Source Code:

```
import math
```

```
# Input perimeter and area  
P, A = map(int, input().split())
```

```
found = False
```

```
# Iterate over possible lengths  
for L in range(1, P//2):
```



```
B = P//2 - L # since 2*(L+B) = P
if L * B == A:
    found = True
    break
```

```
print("yes" if found else "no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

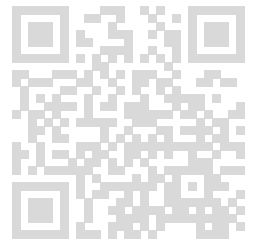
Execution Time:

0.014s

TestCase3:

Input:

< hidden >



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Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

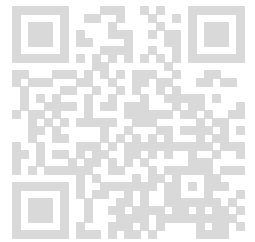
no

Compilation Status: Passed

Execution Time:

0.011s

227. Problem Statement: Given 3 angles A,B,C find if they can be



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interior angles of a triangle.If they form an interior triangle for the given angle,print 'yes' otherwise print 'no'.

Input Description:The input consists of three integers A, B, and C, representing the angles. The constraints for the angles are $0 \leq A, B, C \leq 180$.

Output Description:The output should be 'yes' if the given angles can form an interior triangle, and 'no' otherwise.

Sample Input:2 2 176

Sample Output:yes

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
# Read the three angles
A, B, C = map(int, input().split())

# Check if sum of angles is 180 and all angles are positive
if A > 0 and B > 0 and C > 0 and (A + B + C == 180):
    print("yes")
else:
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

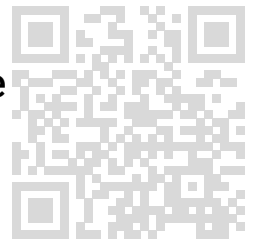
< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:



0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

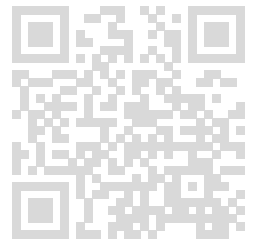
Expected Output:

< hidden >

Output:

yes

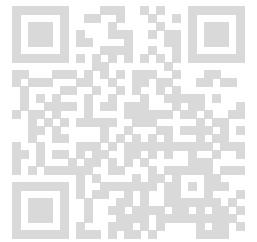
Compilation Status: Passed



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Execution Time:

0.013s



228. Problem Statement: Given a number N , print the odd factors for the N .

Input Description: The input consists of a single integer N , where $1 \leq N \leq 1000$.

Sample Input: 9

Sample Output: 1 3 9

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())

# Collect odd factors
odd_factors = [i for i in range(1, N+1) if N % i == 0 and i % 2 != 0]

# Print result
print(*odd_factors)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 3

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 41

Compilation Status: Passed

Execution Time:

0.015s

TestCase4:

Input:

< hidden >

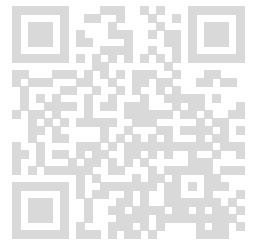
Expected Output:

< hidden >

Output:

1 5

Compilation Status: Passed



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Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 3 9

Compilation Status: Passed

Execution Time:

0.014s

229. Problem Statement: Given a number **N**, print 'INT' if it is integer range or print 'LONG' if it is greater.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: 999

Sample Output: INT

Completion Status: Completed

Concepts Included:

mathematics

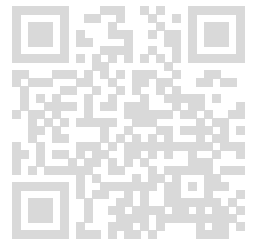
Language Used: PYTHON 3

Source Code:

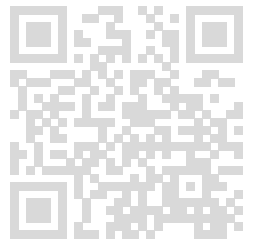
```
# Read input
N = int(input())
```

```
# In Python, int can be arbitrarily large, but based on the problem constraints:
# Assuming INT range is 1 to 1000 for this problem (as per sample input/output)
# Adjust the upper bound if a different range is expected
INT_MAX = 1000
```

```
if N <= INT_MAX:
```



```
print("INT")
else:
print("LONG")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

INT

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

LONG

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

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Output:

INT

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

INT

Compilation Status: Passed

Execution Time:

0.013s

230. Problem Statement: Given a number N, check if N is divisible by any number less than N (ie., it leaves no remainder) except 1.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: 10

Sample Output: yes

Completion Status: Completed

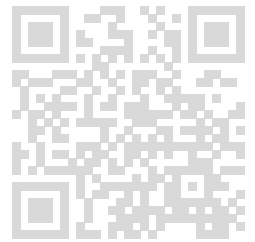
Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())
```



```
# A number N is divisible by some number other than 1 if it is not prime
# Check for divisibility from 2 to sqrt(N)
found = False
for i in range(2, int(N**0.5) + 1):
    if N % i == 0:
        found = True
        break
```

```
if found:
    print("yes")
else:
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

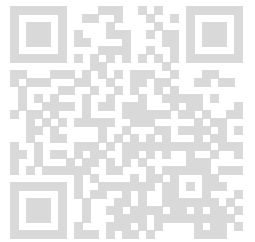
Output:

no

Compilation Status: Passed

Execution Time:

0.014s



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TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.015s

231. Problem Statement: Given a number N and an array of N integers, find the maximum of Bitwise OR of all segments.

Input Description: Input Size : $N \leq 100000$

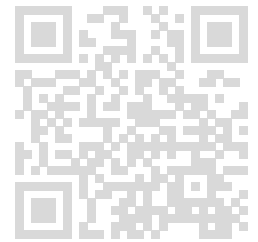
Sample Input: 22 4

Sample Output: 6

Completion Status: Completed

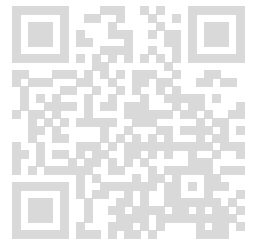
Concepts Included:

bitwise



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Language Used: PYTHON 3



Source Code:

```
# Read input
N = int(input())
arr = list(map(int, input().split()))

# Initialize OR result
max_or = 0

# Compute OR of all elements (bitwise OR is associative)
for num in arr:
    max_or |= num

print(max_or)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

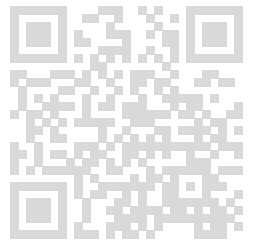
Output:

1

Compilation Status: Passed

Execution Time:

0.014s



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

9

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

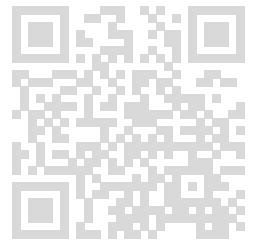
Output:

351

Compilation Status: Passed

Execution Time:

0.01s



232. Problem Statement: Given a number N, print the Bitwise NOT of that number.

Input Description: Input Size : $1 \leq N \leq 10000$

Sample Input: 5

Sample Output: -6

Completion Status: Completed

Concepts Included:

bitwise

basics

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())

# Bitwise NOT operation
print(~N)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

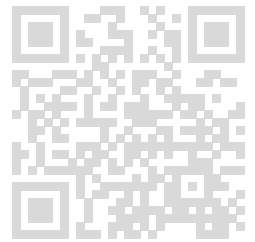
Output:

-3457

Compilation Status: Passed

Execution Time:

0.01s

**TestCase2:****Input:**

< hidden >

Expected Output:

< hidden >

Output:

-11

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

-101

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

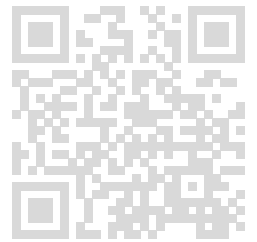
Output:

-6

Compilation Status: Passed

Execution Time:

0.013s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-4

Compilation Status: Passed

Execution Time:

0.013s

233. Problem Statement: Given a number N and an array of N elements, find the Bitwise XOR of the array elements.

Input Description: The input consists of an integer N, representing the size of the array, followed by N array elements. The input size N is at most 100000.

Output Description: The output is the Bitwise XOR of all elements in the array.

Sample Input: 22 4

Sample Output: 6

Completion Status: Completed

Concepts Included:

array

bitwise

bascis

Language Used: PYTHON 3

Source Code:

```
# Read input
```

```
N = int(input())
arr = list(map(int, input().split()))
```

```
# Initialize XOR result
xor_result = 0
```

```
# XOR all elements
for num in arr:
    xor_result ^= num
```

```
# Print the result
print(xor_result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

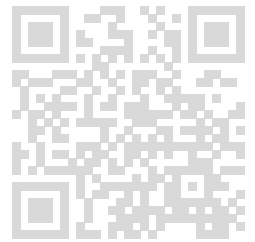
Output:

7

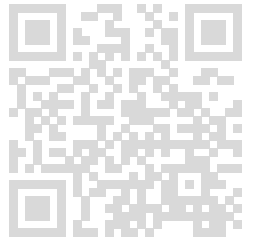
Compilation Status: Passed

Execution Time:

0.014s



Mohammed (sinwanmohammed022@gmail.com)



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

8

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

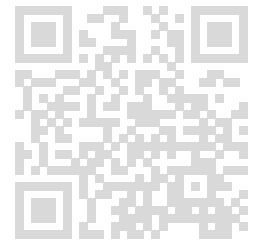
327

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.014s



234. Problem Statement: Given 2 numbers N,K print the number after performing bitwise left shift 'K' times.

Input Description: The input consists of two integers, N and K, where $1 \leq N, K \leq 1000$.

Output Description: The output is the integer N after performing a bitwise left shift K times.

Sample Input: 5 2

Sample Output: 20

Completion Status: Not Completed

Concepts Included:

bitwise

Language Used: PYTHON 3

Source Code:

```
# Read input
N, K = map(int, input().split())

# Perform bitwise left shift
result = N << K

# Print the result
print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.011s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

5242880

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:**Input:**

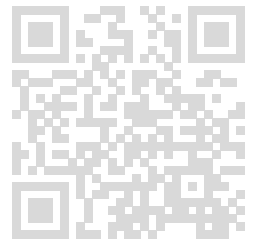
< hidden >

Expected Output:

< hidden >

Output:

105553116266496

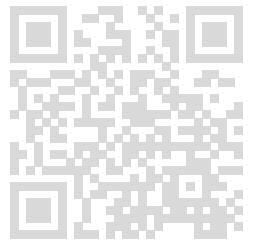


Mohammed (sinwanmohammed022@gmail.com)

Compilation Status: Failed

Execution Time:

0.013s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6

Compilation Status: Passed

Execution Time:

0.013s

235. Problem Statement: Given 2 numbers N,K print the value of nPk (P-Permutation).

Input Description: Input Size : $K \leq N \leq 10$

Sample Input: 5 2

Sample Output: 20

Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
import math
```

```
# Read input
```

```
N, K = map(int, input().split())
```

```
# Calculate nPk using formula:  $nPk = N! / (N-K)!$ 
```

```
nPk = math.factorial(N) // math.factorial(N - K)
```


print(nPk)

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

20

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

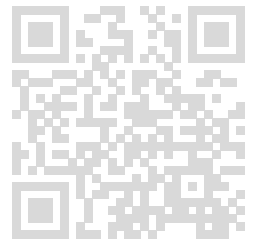
Input:

< hidden >

Expected Output:

< hidden >

Output:



Mohammed (sinwanmohammed022@gmail.com)

3

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3628800

Compilation Status: Passed

Execution Time:

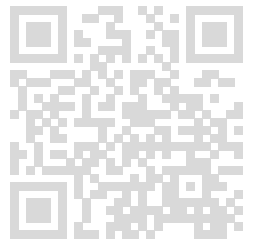
0.01s

236. Problem Statement: Given 2 numbers N,K print the value of nCk (C-Combination).

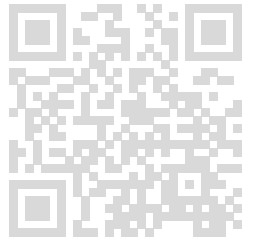
Input Description: Input Size : $K \leq N \leq 10$

Sample Input: 5 2

Sample Output: 10



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Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
import math

# Read input
N, K = map(int, input().split())

# Calculate nCk using formula:  $nCk = N! / (K! * (N-K)!)$ 
nCk = math.factorial(N) // (math.factorial(K) * math.factorial(N - K))

print(nCk)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed**Execution Time:**

0.014s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed**Execution Time:**

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

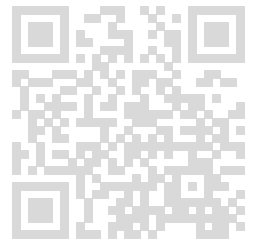
3

Compilation Status: Passed**Execution Time:**

0.015s

TestCase5:**Input:**

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

237. Problem Statement: Given a number N in decimal convert it into binary value.

Input Description: Input Size : $N \leq 100000$

Sample Input: 5

Sample Output: 101

Completion Status: Not Completed

Concepts Included:

mathematics

array

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())

# Convert decimal to binary and remove '0b' prefix
binary = bin(N)[2:]

print(binary)
```

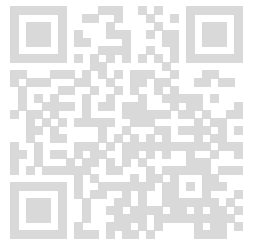
Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:



Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

1000

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

110

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1000

Compilation Status: Passed

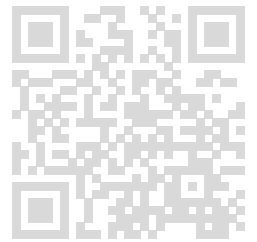
Execution Time:

0.014s

TestCase4:

Input:

< hidden >



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Expected Output:

< hidden >

Output:

110110010000

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

11011011010001

Compilation Status: Failed

Execution Time:

0.01s

238. Problem Statement: Given a number N and 2 arrays A and B of sorted order of size N, print the common elements. If it is not found print -1.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: 51 1 1 1 1 1 2 3 4 5

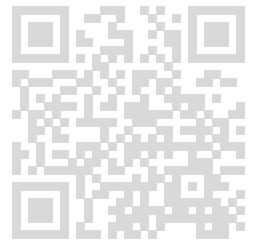
Sample Output: 1

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3



Source Code:

```
# Input
N = int(input())
A = list(map(int, input().split()))
B = list(map(int, input().split()))

i = j = 0
common = []

# Two-pointer approach since arrays are sorted
while i < N and j < N:
    if A[i] == B[j]:
        # To avoid duplicates in the result
        if not common or common[-1] != A[i]:
            common.append(A[i])
        i += 1
        j += 1
    elif A[i] < B[j]:
        i += 1
    else:
        j += 1

# Print result
if common:
    print(*common)
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

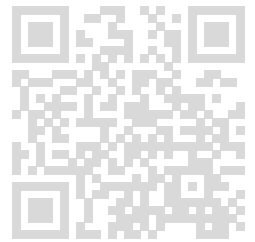
Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:



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< hidden >

Expected Output:

< hidden >

Output:

1 4 8

Compilation Status: Passed

Execution Time:

0.015s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

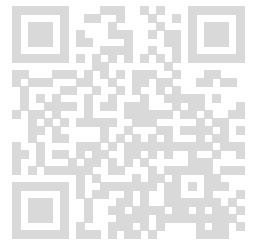
1 8

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:



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Input:

< hidden >

Expected Output:

< hidden >

Output:

82

Compilation Status: Passed

Execution Time:

0.015s

239. Problem Statement: Given a number N and an array of N integers, print all integers which are divisible by the previous integer.

Input Description: The input consists of an integer N, followed by an array of N integers. N is at most 100000.

Output Description: The output consists of all integers from the array that are divisible by their preceding integer.

Sample Input: 51 2 3 6 7

Sample Output: 2 6

Completion Status: Not Completed

Concepts Included:

array

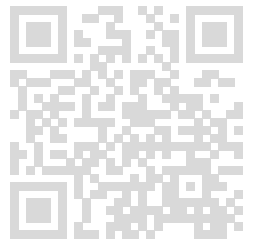
Language Used: PYTHON 3

Source Code:

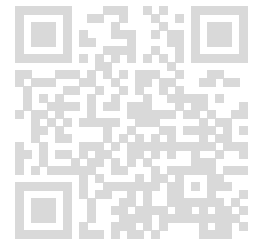
```
# Input
N = int(input())
arr = list(map(int, input().split()))

result = []

# Start from the second element
for i in range(1, N):
    if arr[i] % arr[i - 1] == 0:
        result.append(arr[i])
```



```
# Print result
if result:
    print(*result)
else:
    print(-1)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 6

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

99

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

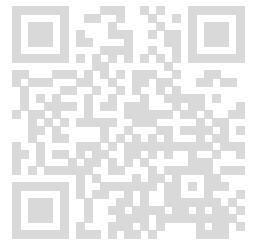
-1

Compilation Status: Failed

Execution Time:

0.014s

240. Problem Statement: Given the values of a,b and x in the



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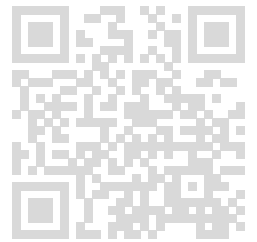
equation $ax + b = y$. Find the value of y .

Input Description:The input consists of three space-separated integers a , b , and x .

Output Description:The output is a single integer representing the value of y .

Sample Input:3 5 2

Sample Output:11



Completion Status: Completed

Concepts Included:

mathematics

companies

Language Used: PYTHON 3

Source Code:

```
# Input
a, b, x = map(int, input().split())

# Calculate y
y = a * x + b

# Print result
print(y)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

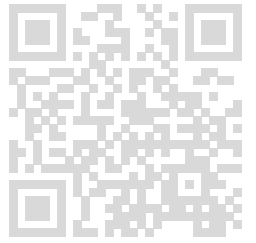
5

Compilation Status: Passed

Execution Time:

0.013s

Mohammed (sinwanmohammed022@gmail.com)



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

10

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

20

Compilation Status: Passed

Execution Time:

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0.009s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

300

Compilation Status: Passed

Execution Time:

0.012s

241. Problem Statement: Rajat is a skilled but lazy competitive programmer. One day his teacher gave him the "Range" of a subarray for multiple sub-arrays efficiently. That is, rajat will be given Q queries and in each query he has to find the range of a subarray from L to R..

The range is defined as follows:

$\text{Range}(L,R) = \text{Maximum}(L,R) - \text{Minimum}(L,R)$

Where

$\text{Maximum}(L,R) = \text{Max}(a[L], a[L+1], a[L+2], \dots, a[R])$

$\text{Minimum}(L,R) = \text{Min}(a[L], a[L+1], a[L+2], \dots, a[R])$

While it is easy enough for rajat to do this by hand he did not know how to write an algorithm to do this efficiently

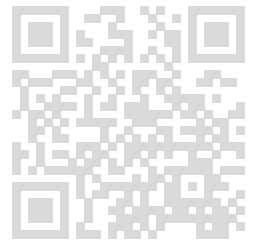
Help rajat solve this problem so he can make his teacher happy without doing any work

Input Description: The first line contains a positive integer 'N' - the size of the array. The second line contains 'N' integers the contents of the array. The third line contains a positive integer 'Q' - the number of queries asked. The next Q lines contain two integers L and R - the starting and ending index of the subarray.

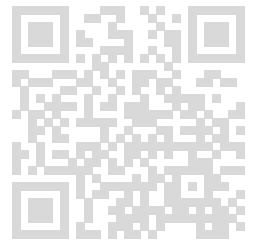
Output Description: The OUTPUT must consist of Q lines- each line containing the answer for the ith query.

Explanation: The "range" of the subarray [1,4] which is the whole array is $\text{max}([1,4])=4$ and $\text{min}([1,4])=1$, therefore $4-1=3$.

Sample Input: 4 1 2 3 4 1 1 4



Sample Output:3



Input Description:

The first line contains a positive integer 'N' - the size of the array

The second line contains 'N' integers the contents of the array

The third line contains a positive integer 'Q' - the number of queries asked

The next Q lines contain two integers L and R - the starting and ending index of the subarray

Output Description:

The OUTPUT must consist of Q lines- each line containing the answer for the ith query

Completion Status: Completed

Concepts Included:

segment tree

Language Used: PYTHON 3

Source Code:

```
# Input
N = int(input())
arr = list(map(int, input().split()))
Q = int(input())

for _ in range(Q):
    L, R = map(int, input().split())
    # Convert 1-based to 0-based indexing
    subarray = arr[L-1:R]
    # Compute range
    result = max(subarray) - min(subarray)
    print(result)
```

Compilation Details:

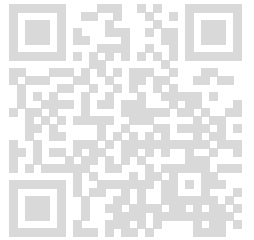
TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

**Output:**

3234
1159
0
2792
2792
0
0

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1724
0

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4653
4357
4432
5390
3705
2859
1961

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1980

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5585

0

4093

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

6248

0

0

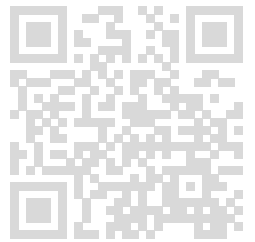
6235

Compilation Status: Passed

Execution Time:

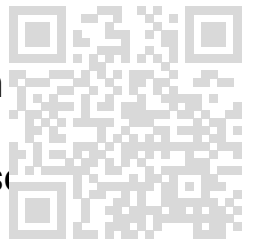
0.013s

242. Problem Statement: You are given an array A of N integers.



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Each integer $A[i]$ ($1 \leq i \leq N$) is an integer between 1 and N both inclusive. You can replace $A[i]$ with any integer from 1 to N both inclusive. Find the minimum number of elements to be replaced so that the resulting array is a valid permutation of the array $B = [1, 2, \dots, N]$.



Input Description: The first line contains the number of integers N. The second line contains N space separated integers.

Output Description: Print a single line containing an integer denoting the minimum number of replacements.

Explanation: 3 is replaced by 5

Sample Input: 5 3 4 3 1 2

Sample Output: 1

Input Description:

The first line contains the number of integers N.
The second line contains N space separated integers.

Output Description:

Print a single line containing an integer denoting the minimum number of replacements.

Completion Status: Completed

Concepts Included:

hashing
counting

Language Used: PYTHON 3

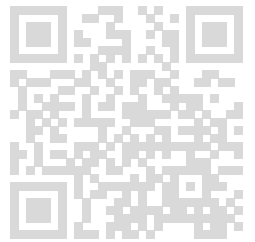
Source Code:

```
# Input
N = int(input())
arr = list(map(int, input().split()))

# Count the number of valid elements in the range 1..N without duplicates
seen = set()
for num in arr:
    if 1 <= num <= N:
        seen.add(num)

# Minimum replacements = N - number of unique valid elements
```

```
min_replacements = N - len(seen)
print(min_replacements)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.015s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Mohammed (sinwanmohammed022@gmail.com)

10

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

37

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

29

Compilation Status: Passed

Execution Time:

0.014s

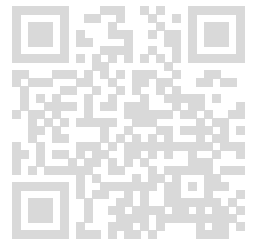
TestCase6:

Input:

< hidden >

Expected Output:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase7:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

TestCase8:

Input:

< hidden >

Expected Output:

< hidden >

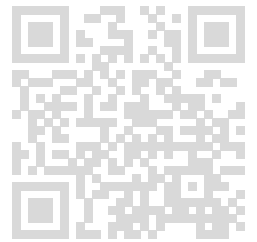
Output:

0

Compilation Status: Passed

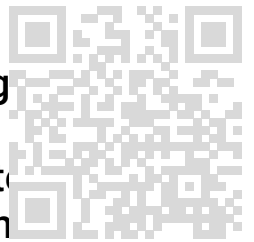
Execution Time:

0.014s



243. Problem Statement:In "A Mathematicians Apology", G.H. Hardy wrote: "There are just four numbers, after unity, which are the sums of the cubes of their digits" Let the largest of those four numbers be X. A hash function for performing separate chaining was defined as

hash(n) := n mod X, where n is a whole number. Separate chaining was performed for N integers in an array A. Mrs. Leela was asked find the number of empty chains from 0 to X-1 (both inclusive) after performing the hashing using separate chaining. Help her solve the mysterious question. Separate chaining resources: https://en.wikipedia.org/wiki/Hash_table#Separate_chaining_with_linked_lists <https://www.geeksforgeeks.org/hashing-set-2-separate-chaining/>



[en.wikipedia.org/wiki/](https://en.wikipedia.org/wiki/Hash_table#Separate_chaining_with_linked_lists)

[Hash_table#Separate_chaining_with_linked_lists https://www.geeksforgeeks.org/hashing-set-2-separate-chaining/](https://www.geeksforgeeks.org/hashing-set-2-separate-chaining/)

Input Description:The first line contains the number of integers N.The second line contains N space separated integers.

Output Description:Print a single line containing an integer denoting the number of empty chains.

Sample Input:150 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Sample Output:392

Input Description:

The first line contains the number of integers N.
The second line contains N space separated integers.

Output Description:

Print a single line containing an integer denoting the number of empty chains.

Completion Status: Completed

Concepts Included:

hashing
mathematics

Language Used: PYTHON 3

Source Code:

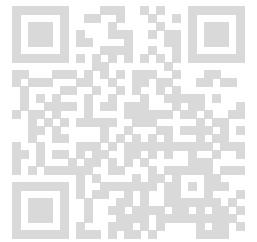
```
# Input
N = int(input())
arr = list(map(int, input().split()))

# Largest Hardy number for sum of cubes of digits
X = 407

# Find all occupied chains
occupied = set()
for num in arr:
```

```
occupied.add(num % X)
```

```
# Empty chains = total chains - occupied chains  
empty_chains = X - len(occupied)  
print(empty_chains)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

406

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

397

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

355

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

395

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

390

Compilation Status: Passed

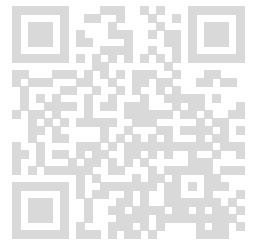
Execution Time:

0.013s

TestCase6:

Input:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

324

Compilation Status: Passed

Execution Time:

0.013s

TestCase7:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

325

Compilation Status: Passed

Execution Time:

0.013s

TestCase8:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

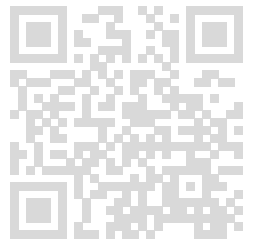
0

Compilation Status: Passed

Execution Time:

0.01s

244. Problem Statement:Value of 'a' is 1, Value of 'b' is -2, Value of



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'c' is 3, Value of 'd' is -4 and so on.

The value of a string for example , "fry" is calculated as:

$\text{value}(\text{"fry"}) = \text{value}(\text{'f'}) + \text{value}(\text{'r'}) + \text{value}(\text{'y'}) = -6 + -18 + 25 = 1$

Given N strings, find the value of each string.

Input Description: The first line consists N, the number of strings S. Then N lines follow, each containing a string.

Output Description: Print N lines, denoting the value of the string.

Sample Input: 2frya

Sample Output: 11

Input Description:

The first line consists N, the number of strings S. Then N lines follow, each containing a string.

Output Description:

Print N lines, denoting the value of the string.

Completion Status: Completed

Concepts Included:

hashing

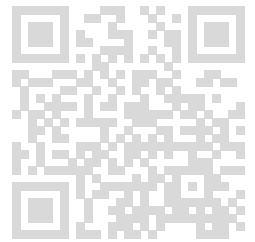
Language Used: PYTHON 3

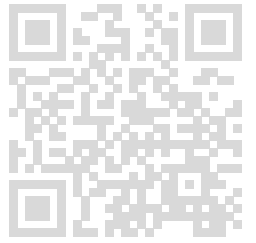
Source Code:

```
# Input
N = int(input())
strings = [input().strip() for _ in range(N)]

for s in strings:
    total = 0
    for ch in s:
        pos = ord(ch) - ord('a') + 1
        if pos % 2 == 0:
            total -= pos
        else:
            total += pos
    print(total)
```

Compilation Details:





TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-26

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

63
39
47
159

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

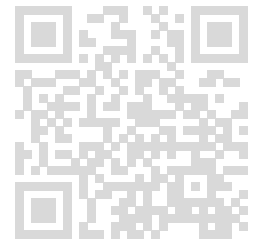
< hidden >

Output:

52
-42

Mohammed (sinwanmohammed022@gmail.com)

57
4
47
-36
20
6
-41
42



Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

7

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

8
-21

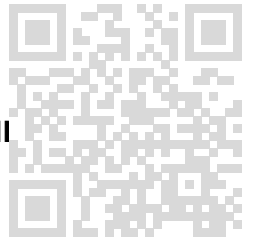
Compilation Status: Passed

Execution Time:

0.014s

Mohammed (sinwanmohammed022@gmail.com)

245. Problem Statement: Given 2 numbers N,X and an array of N elements, check if there exists any 2 numbers in the array with sum equal to X. If found print 'yes' otherwise print 'no'



Input Description: The input consists of two numbers N and X, and an array of N elements. N and X are up to 100000.

Output Description: Print 'yes' if two numbers with sum equal to X are found in the array, otherwise print 'no'.

Sample Input: 4 42 2 0 0

Sample Output: yes

Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
# Input
N, X = map(int, input().split())
arr = list(map(int, input().split()))
```

```
seen = set()
found = False
```

```
for num in arr:
    if X - num in seen:
        found = True
        break
    seen.add(num)
```

```
print("yes" if found else "no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed**Execution Time:**

0.015s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed**Execution Time:**

0.015s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

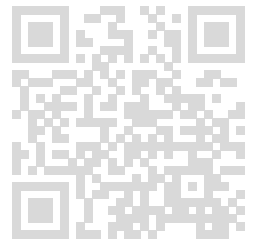
yes

Compilation Status: Passed**Execution Time:**

0.013s

TestCase4:**Input:**

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

246. Problem Statement: Given a range[L,R], print the sum of all the odd numbers within the range(inclusive of L and R).

Sample Input:5 10

Sample Output:21

Completion Status: Completed

Concepts Included:

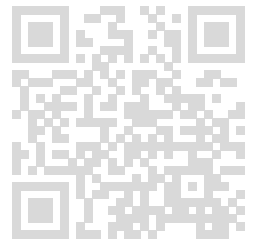
mathematics

array

Language Used: PYTHON 3

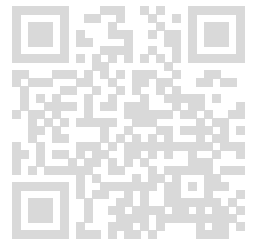
Source Code:

```
L, R = map(int, input().split())
sum_odd = 0
```




```
for num in range(L, R+1):  
    if num % 2 != 0:  
        sum_odd += num
```

```
print(sum_odd)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

12

Compilation Status: Passed

Execution Time:

0.009s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

16

Compilation Status: Passed

Execution Time:

0.012s

TestCase3:

Input:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

27

Compilation Status: Passed

Execution Time:

0.012s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

40

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

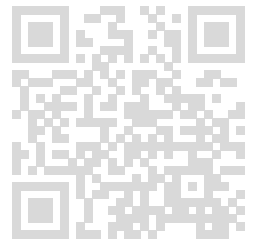
55

Compilation Status: Passed

Execution Time:

0.013s

247. Problem Statement: Given 2 numbers N,K followed by N



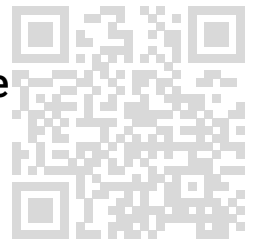
Mohammed (sinwanmohammed022@gmail.com)

elements print all the elements lesser than K in sorted order.If the elements could not be found print -1

Input Description:Input Size : N <= 100000

Sample Input:5 3 1 2 1 4 1

Sample Output:1 1 1 2



Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
# Input
N, K = map(int, input().split())
arr = list(map(int, input().split()))
```

```
# Filter strictly less than K
filtered = [x for x in arr if x < K]
```

```
# Print result
if filtered:
    print(*sorted(filtered))
else:
    print(-1)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

-1

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 1

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 2 4

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

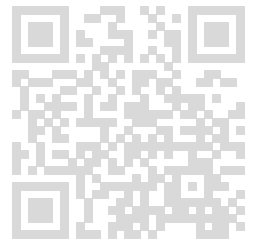
Expected Output:

< hidden >

Output:

1 2

Compilation Status: Passed



Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.012s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1

Compilation Status: Passed

Execution Time:

0.011s

248. Problem Statement: Given 2 strings, check whether it is isomorphic. If it is not isomorphic print '-1'.

Input Description: The input consists of two strings. The size of each string |s| is at most 100000.

Output Description: The output is 'yes' if the strings are isomorphic, otherwise '-1'.

Sample Input: aab xxy

Sample Output: yes

Completion Status: Completed

Concepts Included:

strings

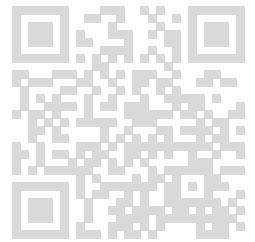
array

Language Used: PYTHON 3

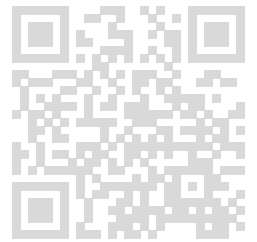
Source Code:

```
s1, s2 = input().split()
```

```
if len(s1) != len(s2):  
    print("no")
```



```
else:
    mapping = {}
    used = set()
    isomorphic = True
    for c1, c2 in zip(s1, s2):
        if c1 in mapping:
            if mapping[c1] != c2:
                isomorphic = False
                break
        else:
            if c2 in used:
                isomorphic = False
                break
            mapping[c1] = c2
            used.add(c2)
    print('yes' if isomorphic else 'no')
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

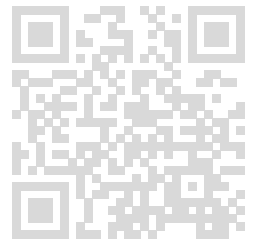
yes

Compilation Status: Passed

Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.01s



TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

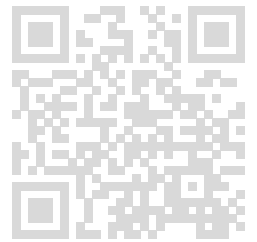
Output:

yes

Compilation Status: Passed

Execution Time:

0.011s



249. Problem Statement: Given a binary number convert it into octal format.

Sample Input: 1100100

Sample Output: 144

Completion Status: Completed

Concepts Included:

array

strings

Language Used: PYTHON 3

Source Code:

```
# Input binary number as a string
binary_num = input().strip()

# Convert binary string to integer, then to octal string
octal_num = oct(int(binary_num, 2))[2:]

print(octal_num)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

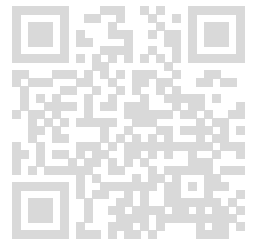
Output:

144

Compilation Status: Passed

Execution Time:

0.01s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

24

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

570

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

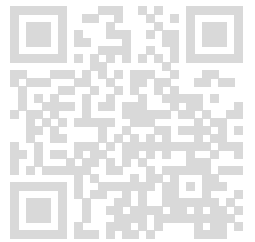
Output:

136

Compilation Status: Passed

Execution Time:

0.014s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

276

Compilation Status: Passed

Execution Time:

0.014s

250. Problem Statement:Accept a string and find if it is of date format 'dd/mm/yyyy'.

Sample Input:01/13/1999

Sample Output:no

Completion Status: Completed

Concepts Included:

strings

Language Used: PYTHON 3

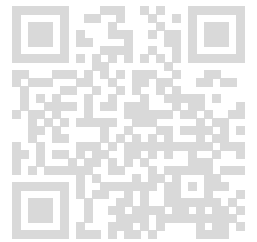
Source Code:

```
import re
from datetime import datetime

# Read input
date_str = input().strip()

# First check the format using regex
if re.fullmatch(r'\d{2}/\d{2}/\d{4}', date_str):
    day, month, year = map(int, date_str.split('/'))
```

```
try:
# Check if it's a valid date
datetime(year, month, day)
print("yes")
except ValueError:
print("no")
else:
print("no")
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.022s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.025s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.023s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.024s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

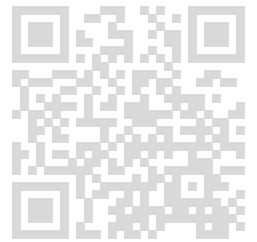
Output:

no

Compilation Status: Passed

Execution Time:

0.026s

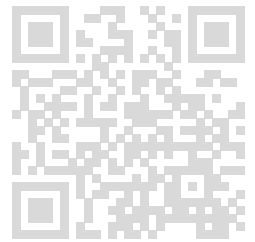


Mohammed (sinwanmohammed022@gmail.com)

251. Problem Statement: Given a number N, check whether it is a power of 2.

Sample Input: 2048

Sample Output: yes



Completion Status: Completed

Concepts Included:

mathematics

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input().strip())

# A number is a power of 2 if it is > 0 and has only one bit set
if N > 0 and (N & (N - 1)) == 0:
    print("yes")
else:
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

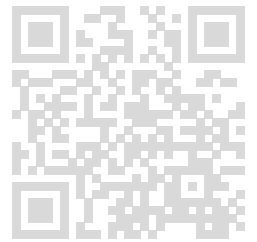
yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

252. Problem Statement: Given a number N, find the number of ones in its binary representation.

Sample Input: 276

Sample Output: 3

Completion Status: Completed

Concepts Included:

strings

array

Language Used: PYTHON 3

Source Code:

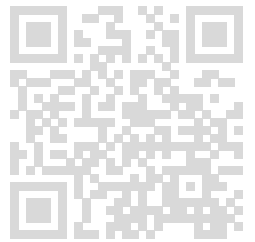
```
# Read input
N = int(input().strip())

# Count the number of 1s in binary representation
count_ones = bin(N).count('1')

print(count_ones)
```

Compilation Details:**TestCase1:**

Input:



< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

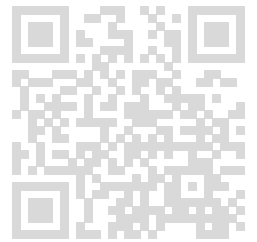
1

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

253. Problem Statement: Given a number N and an array of N integers, find the greatest number which divides all the elements of the array.

Input Description: Input Size : $N \leq 100000$

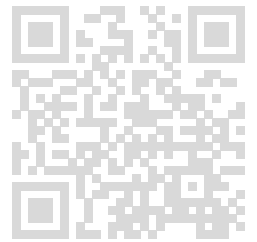
Sample Input: 51 2 3 4 5

Sample Output: 1

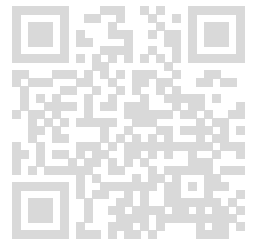
Completion Status: Completed

Concepts Included:

array



Language Used: PYTHON 3



Source Code:

```
from math import gcd
from functools import reduce

# Read input
N = int(input())
arr = list(map(int, input().split()))

# Compute GCD of the entire array
result = reduce(gcd, arr)

print(result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.018s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.012s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.017s

TestCase5:

Input:

< hidden >

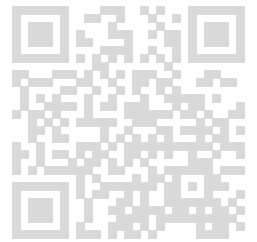
Expected Output:

< hidden >

Output:

1

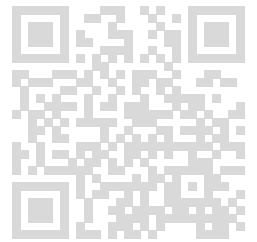
Compilation Status: Passed



Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.017s



254. Problem Statement: Given a numbers N, print the sum of prefix sum and suffix sum array for each position.

Input Description: Input Size : $N \leq 10000$

Sample Input: 4 2 4 4 2

Sample Output: 14 16 16 14

Completion Status: Not Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())
arr = list(map(int, input().split()))

# Compute prefix sums
prefix = [0] * N
prefix[0] = arr[0]
for i in range(1, N):
    prefix[i] = prefix[i-1] + arr[i]

# Compute suffix sums
suffix = [0] * N
suffix[N-1] = arr[N-1]
for i in range(N-2, -1, -1):
    suffix[i] = suffix[i+1] + arr[i]

# Sum prefix and suffix sums for each position
result = [prefix[i] + suffix[i] for i in range(N)]

print(*result)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

388 722 398

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6 6 6 6 6

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

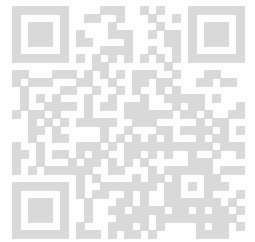
6 6

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:



Mohammed (sinwanmohammed022@gmail.com)

Input:

< hidden >

Expected Output:

< hidden >

Output:

18

Compilation Status: Failed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

388 722 398

Compilation Status: Passed

Execution Time:

0.014s

255. Problem Statement: Given 2 numbers N,K and an array of N integers, find if the element K exists in the array.

Input Description: Input Size : $N \leq 100000$

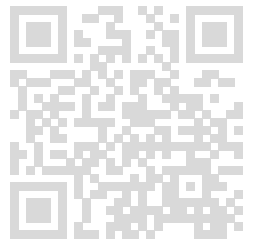
Output Description: The output is 'yes' if the element K exists in the array, otherwise 'no'.

Sample Input: 5 21 2 3 4 5

Sample Output: yes

Explanation: HINT: Read about Binary Search

Completion Status: Completed



Concepts Included:

hash

dictionary

strings

sorting

companies

Accenture

Cognizant

Infosys

Linkedin

Oracle

Qualcomm

TCS

Wipro

guvi-learning-path

Language Used: PYTHON 3

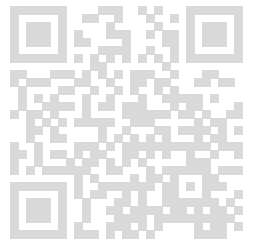
Source Code:

```
# Read input
N, K = map(int, input().split())
arr = list(map(int, input().split()))

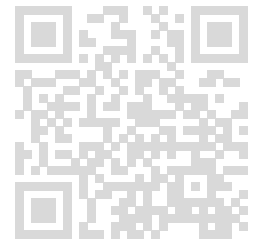
# Ensure array is sorted for binary search
arr.sort()

# Binary search
def binary_search(arr, target):
    left, right = 0, len(arr) - 1
    while left <= right:
        mid = (left + right) // 2
        if arr[mid] == target:
            return True
        elif arr[mid] < target:
            left = mid + 1
        else:
            right = mid - 1
    return False

# Check and print
print("yes" if binary_search(arr, K) else "no")
```



Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

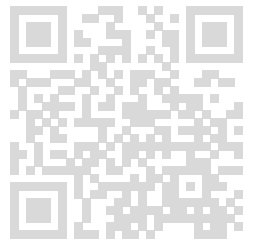
0.014s

256. Problem Statement: Given a number **N** and an array of **N** strings, sort the strings based on the number of vowels in each of the strings in descending order.

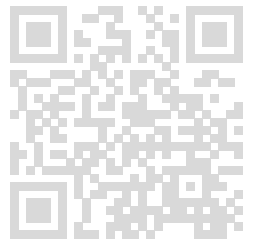
Input Description: Input Size : $N \leq 1000$

Sample Input: 3 VishalAaaAwqr

Sample Output: AaaVishalAwqr



Completion Status: Completed



Concepts Included:

array

strings

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())
strings = [input().strip() for _ in range(N)]

# Function to count vowels
def count_vowels(s):
    return sum(1 for c in s.lower() if c in 'aeiou')

# Sort strings by vowel count descending
strings.sort(key=count_vowels, reverse=True)

# Print the sorted strings
for s in strings:
    print(s)
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

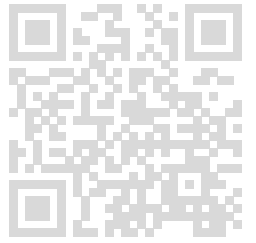
Vishal
Aa
Awqr

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

**Input:**

< hidden >

Expected Output:

< hidden >

Output:

Aaaaa
Aaaa
Aaa
Aa
A

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

Freeze
Clone
Zap

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

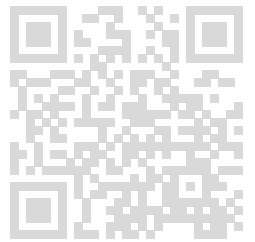
Output:

Lalala

Compilation Status: Passed

Execution Time:

0.014s



TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Clefu

Klept

Compilation Status: Passed

Execution Time:

0.01s

257. Problem Statement: Given a number N in decimal, print the length of the corresponding binary digit.

Input Description: The input consists of a number N in decimal, where $1 \leq N \leq 100000$.

Output Description: The output is the length of the binary representation of N.

Sample Input: 10

Sample Output: 4

Completion Status: Completed

Concepts Included:

mathematics

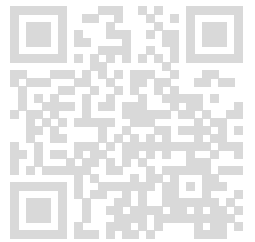
Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())
```

```
# Convert to binary and find length
binary_length = len(bin(N)) - 2 # subtract 2 for '0b' prefix
```

```
# Print result
print(binary_length)
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.013s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6

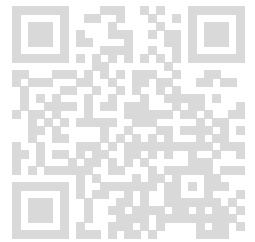
Compilation Status: Passed

Execution Time:

0.01s

258. Problem Statement: Given a number N, print the first N Catalan numbers.

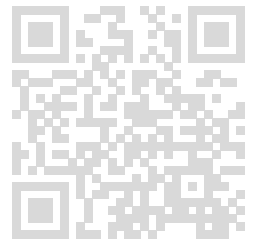
Input Description: Input Size : $N \leq 100$



Mohammed (sinwanmohammed022@gmail.com)

Sample Input:1

Sample Output:1 1



Completion Status: Completed

Concepts Included:

strings

array

mathematics

companies

Language Used: PYTHON 3

Source Code:

```
def catalan_numbers(n):
    catalan = [0] * (n + 1)
    catalan[0] = 1

    for i in range(1, n + 1):
        catalan[i] = 0
        for j in range(i):
            catalan[i] += catalan[j] * catalan[i - 1 - j]

    return catalan

# Read input
N = int(input())

# Generate Catalan numbers
catalans = catalan_numbers(N)

# Print first N+1 Catalan numbers (starting from C0)
print(*catalans[:N+1])
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 2 5

Compilation Status: Passed**Execution Time:**

0.014s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

1 1 2 5 14 42 132 429 1430 4862

Compilation Status: Passed**Execution Time:**

0.014s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

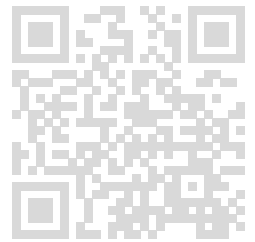
1 1 2

Compilation Status: Passed**Execution Time:**

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 1 2 5 14 42 132 429 1430

Compilation Status: Passed

Execution Time:

0.011s

259. Problem Statement: Given a number N , check if the sum of the digits is a Palindrome. Print 'yes' or 'no' accordingly.

Input Description: The input consists of a number N , where $2 \leq N \leq 1000000000000000000$.

Output Description: The output should be 'yes' if the sum of the digits of N is a Palindrome, and 'no' otherwise.

Sample Input: 13

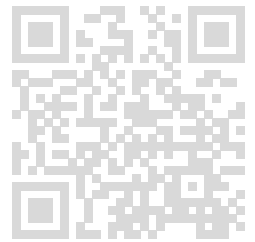
Sample Output: yes

Completion Status: Completed

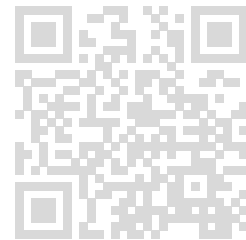
Concepts Included:

array

mathematics



Language Used: PYTHON 3



Source Code:

```
# Read input
N = input().strip()

# Calculate sum of digits
digit_sum = sum(int(d) for d in N)

# Check if sum is palindrome
if str(digit_sum) == str(digit_sum)[::-1]:
    print("yes")
else:
    print("no")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:

Input:

< hidden >

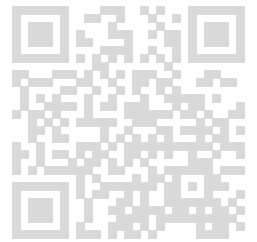
Expected Output:

< hidden >

Output:

yes

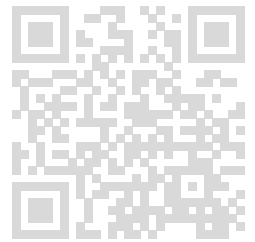
Compilation Status: Passed



Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.014s



260. Problem Statement: Given a number N followed by N numbers. Out of these N numbers some of them are repeated. Write a program to find the number which is repeated and print the repeated numbers in sorted order. If no numbers are repeated print "unique".

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: 71 2 3 2 3 4 3

Sample Output: 2 3

Completion Status: Completed

Concepts Included:

array

companies

Language Used: PYTHON 3

Source Code:

```
# Read input
N = int(input())
arr = list(map(int, input().split()))

# Count occurrences
count = {}
for num in arr:
    count[num] = count.get(num, 0) + 1

# Find numbers with count > 1
repeats = [num for num in count if count[num] > 1]

# Print results
if repeats:
    print(*sorted(repeats))
else:
    print("unique")
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

unique

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

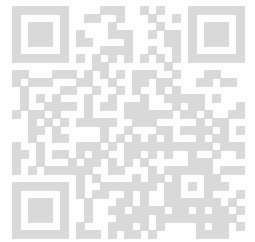
Output:

1 2

Compilation Status: Passed

Execution Time:

0.01s



Mohammed (sinwanmohammed022@gmail.com)

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 3

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

unique

Compilation Status: Passed

Execution Time:

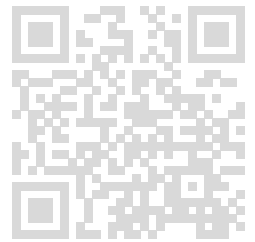
0.014s

261. Problem Statement:Each character of the alphabet is matched to a number. For example A is mapped to 1 , b to 2 so on z to 26. The reverse mapping is also true. 1 is mapped to a , 2 to b 3 to c and so on z to 26. So a number 12258 can be translated to abbeh , aveh , abyh , lbeh , and lyh , so there are 5 ways to translate 12258. Given a number N , write a program to print the number of ways to do this.

Input Description:Input Size : $1 \leq N \leq 100000$

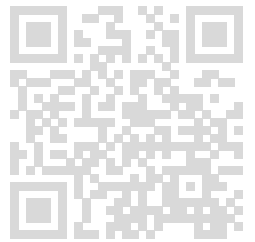
Sample Input:12258

Sample Output:5



Mohammed (sinwanmohammed022@gmail.com)

Completion Status: Completed



Concepts Included:

strings

companies

Language Used: PYTHON 3

Source Code:

```
def count_translations(N):
    s = str(N)
    n = len(s)

    if n == 0:
        return 0

    # dp[i] = number of ways to decode first i digits
    dp = [0] * (n + 1)
    dp[0] = 1 # empty string has 1 way
    dp[1] = 1 # first digit alone (cannot be '0')

    for i in range(2, n + 1):
        # single digit decode (cannot be '0')
        if s[i-1] != '0':
            dp[i] += dp[i-1]
        # two digit decode (10 to 26)
        two_digit = int(s[i-2:i])
        if 10 <= two_digit <= 26:
            dp[i] += dp[i-2]

    return dp[n]

# Read input
N = int(input())
print(count_translations(N))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3

Compilation Status: Passed

Execution Time:

0.01s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

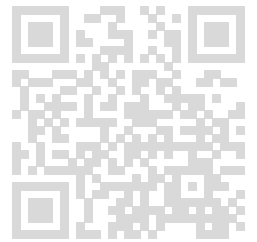
TestCase4:

Input:

< hidden >

Expected Output:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

Output:

1

Compilation Status: Passed**Execution Time:**

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

1

Compilation Status: Passed**Execution Time:**

0.014s

262. Problem Statement: Given a string S of length N, write a program that would reverse every word in the string.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: Hello World

Sample Output: olleH dlroW

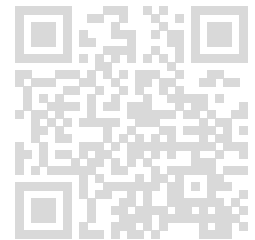
Completion Status: Completed**Concepts Included:**

array

strings

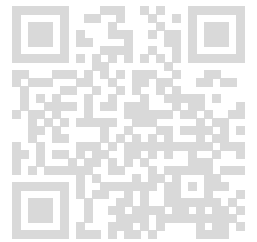
Language Used: PYTHON 3**Source Code:**

```
def reverse_each_word(s):  
    words = s.split()
```



```
reversed_words = [word[::-1] for word in words]
return " ".join(reversed_words)
```

```
# Driver
s = input().strip()
print(reverse_each_word(s))
```



Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

gnimmargorP htiw ++C

Compilation Status: Passed

Execution Time:

0.01s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

gninraeL si nuF

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Mohammed (sinwanmohammed022@gmail.com)

Expected Output:

< hidden >

Output:

radnuS ni dnalrednoW

Compilation Status: Passed

Execution Time:

0.009s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

ytrewq

Compilation Status: Passed

Execution Time:

0.014s

TestCase5:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

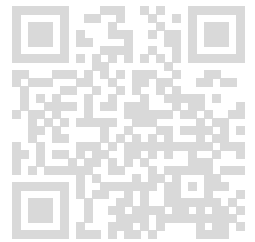
ivuG keeG

Compilation Status: Passed

Execution Time:

0.013s

263. Problem Statement: Given 2 numbers N and M followed by 2



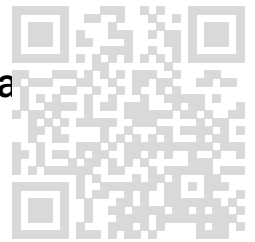
Mohammed (sinwanmohammed022@gmail.com)

arrays A and B of sizes N and M. Check if array B is a subset of array A. If yes print 'yes' else print 'no'.

Input Description: Input Size : $1 \leq N \leq 1000000$

Sample Input: 7 6 1 2 3 4 5 6 7 3 4 5 6 7 1

Sample Output: yes



Completion Status: Completed

Concepts Included:

array

Accolite

GE

Qualcomm

guvi-learning-path

Language Used: PYTHON 3

Source Code:

```
def is_subset(A, B):  
    set_A = set(A)  
    for b in B:  
        if b not in set_A:  
            return "no"  
    return "yes"
```

Driver

```
N, M = map(int, input().split())  
A = list(map(int, input().split()))  
B = list(map(int, input().split()))
```

```
print(is_subset(A, B))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed**Execution Time:**

0.01s

TestCase2:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed**Execution Time:**

0.01s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

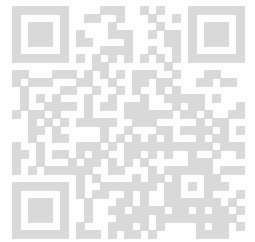
no

Compilation Status: Passed**Execution Time:**

0.014s

TestCase4:**Input:**

< hidden >

Expected Output:

Mohammed (sinwanmohammed022@gmail.com)

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

264. Problem Statement: Given two numbers $N, K (N \geq K)$ and an array of N elements, write a program to find the K th largest element.

Input Description: The input consists of two integers N and K , followed by N elements of an array. Constraints: $1 \leq K \leq N \leq 100000$.

Output Description: The output is the K th largest element from the given array.

Sample Input: 6 2 1 2 3 4 5 6

Sample Output: 5

Completion Status: Completed

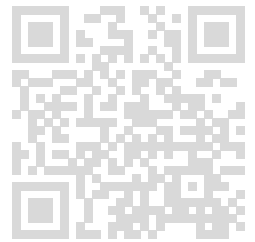
Concepts Included:

array

companies

Amazon

Cisco

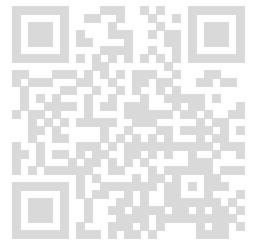


Hike

OYO-Rooms

Walmart

guvi-learning-path



Language Used: PYTHON 3

Source Code:

```
def kth_largest(arr, k):  
    arr.sort(reverse=True) # Sort in descending order  
    return arr[k-1]
```

```
# Driver  
N, K = map(int, input().split())  
arr = list(map(int, input().split()))
```

```
print(kth_largest(arr, K))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

Mohammed (sinwanmohammed022@gmail.com)

32

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

5

Compilation Status: Passed

Execution Time:

0.01s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.013s

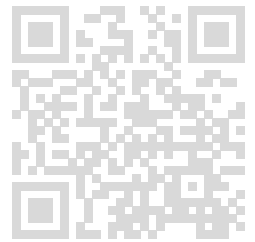
TestCase5:

Input:

< hidden >

Expected Output:

< hidden >



Mohammed (sinwanmohammed022@gmail.com)

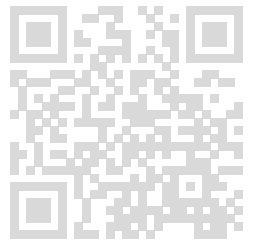
Output:

90

Compilation Status: Passed

Execution Time:

0.009s



265. Problem Statement: Given two numbers N, K and an array of size N , print the three nearest neighbours of K (nearest neighbours are numbers which have least difference with K).

Input Description: Input Size : $4 \leq N, K \leq 100000$

Sample Input: 5 31 2 3 4 6

Sample Output: 2 4 1

Completion Status: Completed

Concepts Included:

array

data structures

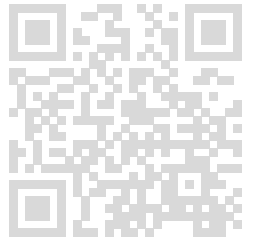
algorithm

Language Used: PYTHON 3

Source Code:

```
def nearest_neighbors(arr, k):  
    # Exclude K itself  
    candidates = [(abs(x - k), x) for x in arr if x != k]  
    # Sort by difference, then by value  
    candidates.sort(key=lambda x: (x[0], x[1]))  
    # Take first 3 neighbors  
    return [x for _, x in candidates[:3]]  
  
# Driver  
N, K = map(int, input().split())  
arr = list(map(int, input().split()))  
  
print(*nearest_neighbors(arr, K))
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 1 -1

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2 3

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

3 19 -19

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2 3 4

Compilation Status: Passed

Execution Time:

0.013s

266. Problem Statement: Given 2 numbers N, K and N arrays each of size K, print the elements that have appeared in all arrays, if any element are not same print '-1'.

Input Description: The input consists of 2 numbers N, K, and N arrays each of size K. **Constraints:** $2 \leq N$, $K \leq 100000$

Output Description: Print the elements that have appeared in all arrays. If no common elements are found, print '-1'.

Sample Input: 2 31 0 20 8 7

Sample Output: 0

Completion Status: Completed

Concepts Included:

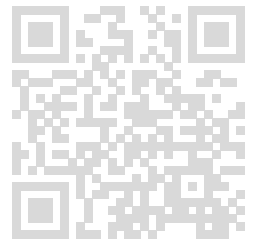
companies

array

Language Used: PYTHON 3

Source Code:

```
def common_elements_in_arrays(arrays):  
    # Convert all arrays to sets  
    sets = [set(arr) for arr in arrays]
```



```
# Take intersection of all sets
common = set.intersection(*sets)
```

```
if not common:
    return [-1]
else:
    return sorted(common)
```

```
# Driver
N, K = map(int, input().split())
arrays = [list(map(int, input().split())) for _ in range(N)]

print(*common_elements_in_arrays(arrays))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 5

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

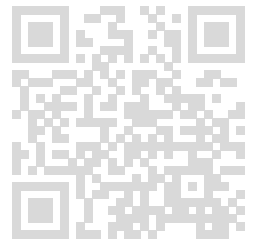
Output:

1

Compilation Status: Passed

Execution Time:

0.014s



Mohammed (sinwanmohammed022@gmail.com)

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 3

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

1 2

Compilation Status: Passed

Execution Time:

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

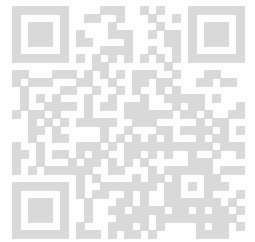
< hidden >

Output:

-1

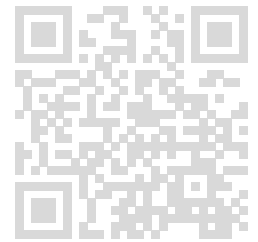
Compilation Status: Passed

Execution Time:



Mohammed (sinwanmohammed022@gmail.com)

0.01s



267. Problem Statement: Given two numbers a and b , write a program to print the count of numbers in the range $[a, b]$ in which there are prime number of 1's in their binary representation.

Input Description: The input consists of two integers, a and b , where $1 \leq A \leq B \leq 100000$.

Output Description: The output is the count of numbers in the given range $[a, b]$ that have a prime number of 1's in their binary representation.

Sample Input: 1 3

Sample Output: 1

Completion Status: Not Completed

Concepts Included:

array

mathematics

Language Used: PYTHON 3

Source Code:

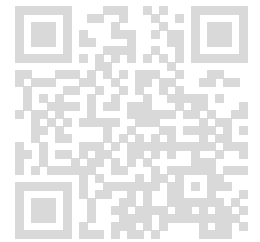
```
def is_prime(n):
    if n < 2:
        return False
    for i in range(2, int(n**0.5) + 1):
        if n % i == 0:
            return False
    return True

def prime_count_in_binary_range(a, b):
    # Precompute primes up to 20
    primes = {i for i in range(2, 20) if is_prime(i)}

    count = 0
    for num in range(a, b + 1):
        ones = bin(num).count('1')
        if ones in primes:
            count += 1
    return count

# Driver
a, b = map(int, input().split())
print(prime_count_in_binary_range(a, b))
```

Compilation Details:



TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

6

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Passed

Execution Time:

0.014s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

4

Compilation Status: Failed

Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.013s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

2

Compilation Status: Passed

Execution Time:

0.01s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

0

Compilation Status: Failed

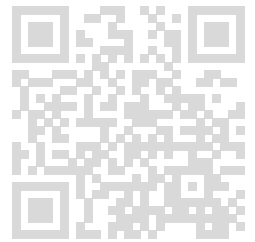
Execution Time:

0.013s

268. Problem Statement: Given N, K and followed by N of integers, find two numbers such that they add up to a specific target number K. Example Input: numbers={2, 7, 11, 15}, K=9, print 'yes' if target achieved (2,7 can be added to get 9) if there is no such pair print 'no'.

Input Description: The input consists of two integers N and K, followed by N integers. N is constrained by $1 \leq N \leq 100000$.

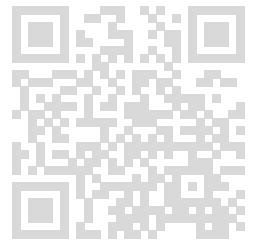
Output Description: The output should be 'yes' if there exists a pair of numbers in the



given N integers that sum up to K, otherwise 'no'.

Sample Input:7 61 2 3 4 5 6 7

Sample Output:yes



Completion Status: Completed

Concepts Included:

array

Language Used: PYTHON 3

Source Code:

```
def find_sum_pair(arr, k):  
    seen = set()  
    for num in arr:  
        if k - num in seen:  
            return "yes"  
        seen.add(num)  
    return "no"  
  
# Driver  
N, K = map(int, input().split())  
arr = list(map(int, input().split()))  
  
print(find_sum_pair(arr, K))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

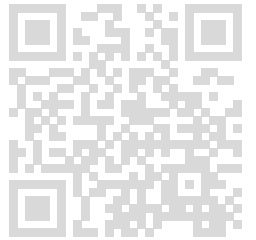
Output:

no

Compilation Status: Passed

Execution Time:

0.01s



TestCase2:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.013s

TestCase3:

Input:

< hidden >

Expected Output:

< hidden >

Output:

yes

Compilation Status: Passed

Execution Time:

0.014s

TestCase4:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

Mohammed (sinwanmohammed022@gmail.com)

0.013s

TestCase5:

Input:

< hidden >

Expected Output:

< hidden >

Output:

no

Compilation Status: Passed

Execution Time:

0.014s

269. Problem Statement: Given an array $A[n]$ of n numbers, create an output array such that $out[i]$ is equal to the product of all the elements of $A[n]$ except $A[i]$. Ex. $out[4]$ assuming $n \geq 5$ will be the product of the numbers from $A[0]$ through $A[3]$ and the numbers from $A[5]$ through $A[n - 1]$. print the out array.

Input Description: Input Size : $1 \leq N \leq 100000$

Sample Input: 51 2 3 4 5

Sample Output: 120 60 40 30 24

Completion Status: Completed

Concepts Included:

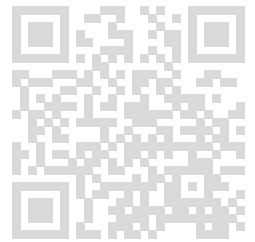
array

Language Used: PYTHON 3

Source Code:

```
def product_except_self(arr):
    n = len(arr)
    prefix = [1] * n
    suffix = [1] * n
    out = [1] * n

    # Build prefix
```



```
for i in range(1, n):
    prefix[i] = prefix[i-1] * arr[i-1]

# Build suffix
for i in range(n-2, -1, -1):
    suffix[i] = suffix[i+1] * arr[i+1]

# Final output
for i in range(n):
    out[i] = prefix[i] * suffix[i]

return out

# Driver
n = int(input())
arr = list(map(int, input().split()))
print(*product_except_self(arr))
```

Compilation Details:

TestCase1:

Input:

< hidden >

Expected Output:

< hidden >

Output:

24 12 24 8 6

Compilation Status: Passed

Execution Time:

0.014s

TestCase2:

Input:

< hidden >

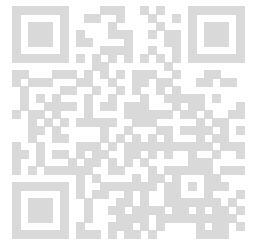
Expected Output:

< hidden >

Output:

54 18 18 54 9

Compilation Status: Passed



Mohammed (sinwanmohammed022@gmail.com)

Execution Time:

0.014s

TestCase3:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

96 96 48 32 24 24

Compilation Status: Passed

Execution Time:

0.013s

TestCase4:**Input:**

< hidden >

Expected Output:

< hidden >

Output:

24 24 8 12 6

Compilation Status: Passed

Execution Time:

0.011s

TestCase5:**Input:**

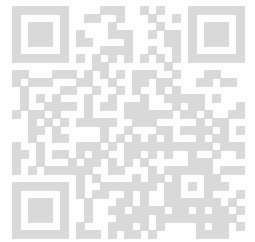
< hidden >

Expected Output:

< hidden >

Output:

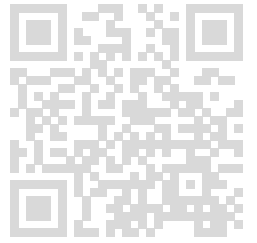
1200000 600000 400000 300000 240000



Compilation Status: Passed

Execution Time:

0.014s



Mohammed (sinwanmohammed022@gmail.com)