

In [2]:

```
lst=[]
n=int(input())
for i in range (0,n):
    ele =int(input())
    lst.append(ele)
print(lst)
prime=[]
for i in lst:
    c=0
    for j in range (1,i):
        if i%j==0:
            c+=1
    if c==1:
        prime.append(i)
print(prime)
# l=list(map(int,input().split()))
```

```
4
23
11
4
22
[23, 11, 4, 22]
[23, 11]
```

In []:

In [14]:

```
"""input:- Richard is now happyil and satisfiedil with his situationil"""
"""output:- Richard is now happy and satisfied with his situation """

x=input("")
l=x.split()
j=[]
for i in l:
    if "il" in i:
        k=i.replace ('il','')
        j.append(k)
    else:
        j.append(i)

s=""
for i in j:
    s=s+i+" "
# s=' '.join(j)
print(s)
```

Richard is now happyil and satisfiedil with his situationil
Richard is now happy and satisfied with his situation

In [11]:

```
"""input:- hello worldaeio 123"""
"""output:- new word is hll wrld 123 and count of numbers is 3."""

x=input("enter your string:-")
l=[]
c=0
for i in x:
    if i in "aeiou":
        pass
    else:
        l.append(i)

for i in x:
    if i in "01233456789":
        c=c+1

s="".join(l)
# s=''
# for i in l:
#     s=s+i
print("The new word is "+s+" and the count of number is ",c)
```

```
enter your string:-hello worldaeio 123
The new word is hll wrld 123 and the count of number is  3
```

In [15]:

```
n=input()
l=n.split()
my_dict={}
for i in l:
    my_dict[i]=l.count(i)

print(my_dict)
print(max(my_dict,key=my_dict.get))
""">>> counts = {"a": 10, "b": 5, "c": 20, "d": 15}
>>> max(counts)
'd'
>>> max(counts, key=counts.get)
'c'"""
"""max(freq) returns the maximum key in the dictionary, i.e. the last one alphabetically

When you add the key=freq.get keyword argument, you get the element x with the maximum v
```

```
heelo hello hello hi hi hi eorld erold
{'heelo': 1, 'hello': 2, 'hi': 3, 'eorld': 1, 'erold': 1}
hi
```

Out[15]:

```
'max(freq) returns the maximum key in the dictionary, i.e. the last one a
lphabetically if the keys are strings\n\nWhen you add the key=freq.get ke
yword argument, you get the element x with the maximum value of freq.get
(x)'
```

In []:

```
"""
input

5
1
10000
electric
yes
2
20000
diesel
no
3
30000
electric
yes
4
40000
petrol
yes
5
50000
electric
no
"""

"""

output
electric:3
diesel:0
petrol:1
"""
```

In []:

```
l1=[]
l2=[]

for i in range(int(input())):
    x1=int(input())
    x2=int(input())
    x3=input().upper()
    x4=input().upper()
    l1.append(x3)
    l2.append(x4)

l3=[]
for i in l1:
    if i in l3:
        pass
    else:
        l3.append(i)

print(l3)
l4=[]
for i in l3:
    c=0
    for j in range(0,len(l1)):
        if l1[j].upper()==i.upper() and l2[j].upper()=="YES":
            c=c+1
    l4.append(c)

for i in range(0,len(l3)):
    print(l3[i].capitalize(),":",l4[i])
```

In []:

In []:

```
""" iq=(health number/age)*100 """
"""
no of person data:-03
serial no.
name
health number
age
"""
"""
input:-
3
1
anmol
181
24
2
james
236
34
3
peter
160
20
output:-
1 anmol 754.16
2 james 694.11
3 peter 800.00
"""
```

In [8]:

```
l1=[]
l2=[]
l3=[]
for i in range (int(input())):
    x1=int(input())
    x2=input()
    x3=int(input())
    x4=int(input())
    l1.append(x1)
    l2.append(x2)
    if x3 %x4 !=0:
        x5=float((x3/x4)*100)
        j=str(round(x5,3))
        k=j[0:len(j)-1]
        l3.append(k)
    else:
        x5=str(float((x3/x4)*100))
        x5=x5+"0"
        l3.append(x5)

for i in range(len(l1)):
    print(l1[i], "", l2[i], "", l3[i])
```

```
3
1
anmol
181
24
2
james
236
34
3
peter
160
20
1  anmol  754.16
2  james  694.11
3  peter  800.00
```

In [19]:

```
x3=181
x4=24
print((x3/x4)*100)
print(float(x3/x4)*100)
f =800.0
n = 2
x=int(f * 10 ** n) / 10 ** n
# 1.67
print(x)
```

```
754.1666666666667
754.1666666666667
800.0
```

```
no_of_person=int(input()) l1=[] l2=[] l3=[] for i in range(int(input())): x1=int(input()) x2=(input()) x3=int(input())
x4=int(input()) l1.append(x1) l2.append(x2) if x3%x4 !=0: x5=float((x3/x4)100) j=str(round(x5,3))
k=j[0:len(j)-1] l3.append(k) else: x5=str(float((x3/x4)100)) x5=x5+"0"

l3.append(x5)

print(l3)
```

count no of prime in a list

```
n=int(input())

lst=[] for i in range(0,n): ele=int(input()) lst.append(ele)

print(lst) prime=[] for i in lst: c=0 for j in range(1,i): if i%j==0: c+=1 if c==1: prime.append(i)

print(prime)
```

In []:

In []:

```
"""input:-hello wordaeiou 123
output:-new word hll wrd 123 and count of number 3
"""
```

In [4]:

```
x=input()
c=0
l=[]
for i in x:
    if i in "aeiou":
        pass
    else:
        l.append(i)
for i in x:
    if i in "0123456789":
        c=c+1
s=""
for i in l:
    s=s+i
print("new word is "+s+" and count of number "+str(c))
```

```
hello word 123
new word ishll wrd 123and count of number3
```

In []:

```
"""
HOW TO USE SPLIT() AND REPLACE()FUNCTION IN PYTHON
consider an input:-
input->Richard is now happyil and satisfiedil with his situationil
Take this input to the program and convert the input into following output

output:-Richard is now happy and satisfied with his situation

purpose

we have to remove "il"unwanted from string

"""
```

In [13]:

```
n=input()

l=n.split()
print(l)
lst=[]
for i in l:
    if "il" in i:
        k=i.replace('il',"")
        lst.append(k)
    else:
        lst.append(i)
print(lst)
s=''
for m in lst:
    s=s+m+" "
print(s)
```

```
Richard is now happyil and satisfiedil with his situationil
['Richard', 'is', 'now', 'happyil', 'and', 'satisfiedil', 'with', 'his',
'situationil']
['Richard', 'is', 'now', 'happy', 'and', 'satisfied', 'with', 'his', 'sit
uation']
Richard is now happy and satisfied with his situation
```

In []:

In []:

In []:

In [1]:

```
n=int(input())
lst=[]
for i in range(0,n):
    ele=(input().split(" "))
    lst=lst+ele
print(lst)
```

```
4
shiv hello
rahul kon
sahil hello
pushpraj
['shiv', 'hello', 'rahul', 'kon', 'sahil', 'hello', 'pushpraj']
```

In []:

```
##count number of times a given words repeated in the user input strings
input:-
    3
    hello pushpraj
    hello friend
    good morning
    hello

output:-
    count of given word:-2

note:-
    all search are case insensitive
    if no search found print "not found"
```

In [3]:

```
n=int(input())
lst=[]
for i in range(0,n):
    ele=(input().split(" "))
    lst=lst+ele
print(lst)
m=input()
count=0
for i in lst:
    if i.upper()==m.upper():
        count+=1
if count!=0:
    print("output ",count)
else:
    print("not found")
```

```
3
hello friend
hello
good morning
['hello', 'friend', 'hello', 'good', 'morning']
hello
output 2
```

In [2]:

```
n=int(input())
lst=[]
for i in range(0,n):
    ele=(input().split())
    lst.append(ele)

print(lst)
```

```
3
hello friend
good morning
rahul
[['hello', 'friend'], ['good', 'morning'], ['rahul']]
```

In [14]:

```
lst=[]
for i in range(int(input())):
    j=((input()).split(" "))
    lst=lst+j
#print(lst)
m=input()
count=0
for i in lst:
    if i.upper()==m.upper():
        count+=1
if count !=0:
    print("count of given word:-",count)
else:
    print("not found")
```

```
3
hello friend
heelo fdsd
good morning
hello1
not found
```

In []:

TCS 10th feb 2023 15 marks IPA questions

input

4 *# number of value need to store*

5

5

10

15

5

output

MAXIMUM NUMBER COMPLETELY DIVISIBLE :15

NOTE:-

IF THERE IS NO MAX NUMBER COMPLETELY DIVISIBLE BY GIVEN

INPUT PRINT "NO NUMBER FOUND"

In [16]:

```
lst=[]
n=int(input())
for i in range(0,n):
    ele=int(input())
    lst.append(ele)
m=int(input("divisible number:-"))
lst1=[]
if lst[i]%m==0:
    lst1.append(lst[i])

if len(lst1)==0:
    print("NO NUMBER FOUND" )
else:
    print("maximum number completely divisible :-",max(lst1))
```

4

5

5

10

15

divisible number:-5

maximum number completely divisible :- 15

In []:

TCS 10th feb 2023 15 marks IPA questions

input

4 *# number of value need to store*

5

5

10

15

5

output

MAXIMUM NUMBER COMPLETELY DIVISIBLE :15

NOTE:-

IF THERE IS NO MAX NUMBER COMPLETELY DIVISIBLE BY GIVEN

INPUT PRINT "NO NUMBER FOUND"

In [3]:

```
n=int(input())
lst=[]
for i in range(0,n):
    ele=int(input())
    lst.append(ele)

print(lst)
m=int(input("divisible number:-"))
lst1=[]
for i in range(0,len(lst)):
    if lst[i]%m==0:
        lst1.append(lst[i])

if len(lst1)==0:
    print("NO NUMBER FOUND")
else:
    print("maximum number completely divisible :-",max(lst1))
```

5

5

10

15

10

100

[5, 10, 15, 10, 100]

divisible number:-5

maximum number completely divisible :- 100

In [24]:

```
l1=[1,2,3,4]
l2=[2,3,4,5]
k=list(zip(l1,l2))
m=[]
for i in k:
    m.append(list(i))
print(m)
```

```
[[1, 2], [2, 3], [3, 4], [4, 5]]
```

In [37]:

```
n=143024233
m=23.34
k=float(n%m)
print(round(k,2))
```

```
3.94
```

In [46]:

```
n=int(input())
l1=[]
for i in range(0,n):
    ele=int(input())
    l1.append(ele)

m=int(input())
l2=[]
for j in range(0,m):
    ele1=int(input())
    l2.append(ele1)
l3=[]
for x in l1:
    if x in l2:
        l3.append(x)
for y in l3:
    print(y,end='')
```

```
4
2
3
34
23
3
1
2
3
23
```

In [77]:

```
print(l1)
print(l2)
print(l3)
print("common element:",*l3,sep=' ')
```

```
[2, 3, 34, 23]
[1, 2, 3]
[2, 3]
common element: 2 3
```

In [72]:

```
print("common elements:",' '.join(map(str,l3)))
```

```
common elements: 2 3
```

In [75]:

```
print("common elements:",' '.join(map(str,l3)))
```

```
common elements: 2 3
```

In [78]:

```
l4=dict(zip(l1,l2))
print(l4)
```

```
{2: 1, 3: 2, 34: 3}
```

In [84]:

```
for x,y in l4.items():
    print(y)
```

```
1
2
3
```

In [87]:

```
l1=["bob","james","rahul","rohit"]
l2=[2.4,3.6,7.8,3.4]
val=7
l3=dict(zip(l1,l2))
print(l3)
for x,y in l3.items():
    if y<val:
        print(x)
```

```
{'bob': 2.4, 'james': 3.6, 'rahul': 7.8, 'rohit': 3.4}
bob
james
rohit
```

In [1]:

```
lst=[]
for i in range(int(input())):
    ele=int(input())
    lst.append(ele)
print(lst)
lst1=[]
s=0
for i in lst:
    if i >1:
        for num in range(2,i):
            if i%num==0:
                break
        else:
            lst1.append(i)
            s=s+1

print(lst1)

if s==0:
    print("no number found")
else:
    print(s)
```

```
5
1
2
3
4
5
[1, 2, 3, 4, 5]
[2, 3, 5]
3
```

In [5]:

```
lst=["electric","diesel","petrol","electric","petrol"]
lst1=["yes","no","yes","no","no"]
for i in lst1:
    if i=="yes":
        x=i.replace("yes","1")
        lst1.append(x)
    else:
        x=i.replace("no","no")

print(lst1)
lst2=list(zip(lst,lst1))
print(lst2)
```

```
['yes', 'no', 'yes', 'no', 'no']
[('electric', 'yes'), ('diesel', 'no'), ('petrol', 'yes'), ('electric',
'no'), ('petrol', 'no')]
```

In [6]:

```
txt = "I like bananas"

x = txt.replace("bananas", "apples")

print(x)
```

I like apples

In []:

```
"""input:-
4
101
mountabu
mountain
102
india
forest
103
america
beach
104
japan
mountain

MOUNTAIN
"""

output:-
104
japan
mountain
101
mountabu
mountain
"""
```


In []:

```
l1=[]
l2=[]
l3=[]

for i in range(int(input())):
    x1=int(input())
    x2=input()
    x3=input()
    l1.append(x1)
    l2.append(x2)
    l3.append(x3)
l1=l1[::-1]
l2=l2[::-1]
l3=l3[::-1]
l4=[]
target=input()
for i in range(0,len(l1)):
    if l3[i].lower()==target.lower():
        # l4.append(l1[i])
        # l4.append(l2[i])
        # l4.append(l3[i])
        l4.extend((l1[i],l2[i],l3[i]))
# l4=str(l4)
# print(l4)
if len(l4)==0:
    print("No Record Found")
else:
    for i in l4:
        print(i)
```

In []:

```
n=int(input())
x2=[]
x3=[]
x4=[]
for i in range(n):
    x2.append(int(input()))
    x3.append(input())
    x4.append(input())
x5=input()
x2=x2[::-1]
x3=x3[::-1]
x4=x4[::-1]
for i in range(n):
    if x5.lower()==x4[i].lower():
        print(x2[i])
        print(x3[i])
        print(x4[i])
```

In []:

```
class DS:
    def __init__(self,x1,x2,x3):
        self.X1=x1
        self.X2=x2
        self.X3=x3
class DS1:
    def __init__(self,l1):
        self.L=l1
    def f1(self,s):
        l2=[]
        l3=[]
        l4=[]
        for i in self.L:
            if i.X3.lower()==s.lower():
                l2.append(i.X1)
        l3=l2[::-1]
        for j in l3:
            for i in self.L:
                if i.X1==j:
                    l4.extend((i.X1,i.X2.lower(),i.X3.lower()))
        if len(l4) != 0:
            for i in l4:
                print(i)
        else:
            print("NO record found")

l=[]
for i in range(int(input())):
    x1=int(input())
    x2=input()
    x3=input()
    l.append(DS(x1,x2,x3))

ans=DS1(l)
s=input()
ans.f1(s)
```

In []:

```
class DS:
    def __init__(self,x1,x2,x3):
        self.X1=x1
        self.X2=x2
        self.X3=x3

class DS1:
    def __init__(self,l):
        self.L=l

    def f1(self,s):
        l1=[]

        for i in self.L:
            if i.X3.lower()==s.lower():
                l1.append(i.X1)

        l1=l1[::-1]
        l2=[]
        for j in l1:
            for i in self.L:
                if i.X1==j:
                    l2.extend((i.X1,i.X2.lower(),i.X3.lower()))

        if len(l2)==0:
            print("No Record Found")
        else:
            for i in l2:
                print(i)

l=[]
for i in range(int(input())):
    x1=int(input())
    x2=input()
    x3=input()
    l.append(DS(x1,x2,x3))
#     l.append(DS(int(input()),input(),input()))
ans=DS1(l)
s=input()
ans.f1(s)
```

In []:

```
"""
input:-
5
101
Tanmay
delhi
90
88
93
102
sunil
delhi
90
95
90
103
karvi
maharashtra
70
45
50
104
monika
tamilnadu
20
35
40
105
ram
tamilnadu
90
65
50
a

output:-

102 sunil 275 A delhi
101 tanmay 271 A delhi

delhi 100:0
maharashtra 100:0
tamilnadu 50:50
"""
```

In []:

#29 jan IPA coding question 35 marks

```
serialno1=[]
name1=[]
state1=[]
total_marks1=[]
for i in range (int(input())):
    serialno=int(input())
    name=input()
    state=input()
    # x4=int(input())
    # x5=int(input())
    # x6=int(input())
    # total_marks=(x4+x5+x6)
    total_marks=(int(input())+int(input())+int(input()))
    serialno1.append(serialno)
    name1.append(name)
    state1.append(state)
    total_marks1.append(total_marks)

target=input()
percentage=[]
grade=[]
for i in total_marks1:
    percentage.append(i//3)

for i in percentage:
    if i >=80:
        grade.append("A")
    elif 60<=i<80:
        grade.append("B")

    elif 50<=i<60:
        grade.append("C")
    else:
        grade.append("D")
serialno1=serialno1[::-1]
name1=name1[::-1]
state1=state1[::-1]
total_marks1=total_marks1[::-1]
grade=grade[::-1]
for i in range(0,len(grade)):
    if grade[i].lower()==target.lower():
        print(serialno1[i],name1[i],total_marks1[i],grade[i],state1[i])
```

In []:

```
"""
input:-
5
film studio HR
Avenger
$600million
english
film studio AR
monkey king
$600million
chines
film studio XT
WITCH
$800million
english
film studio R
Godzilla
$800million
japanes
film studio V
Vamtine
$300million
english

output:-
film studio HR
Avenger
film studio XT
WITCH

"""
```

In []:

```
studio1=[]
movie1=[]
cost1=[]
language1=[]
for i in range(int(input())):
    studio=input()
    movie=input()
    x3=input()
    cost=int(x3[1:4])
    language=input()
    studio1.append(studio)
    movie1.append(movie)
    cost1.append(cost)
    language1.append(language)
lst=[]
for i in range(len(studio1)):
    if language1[i].upper()=="ENGLISH" and cost1[i]>500:
        lst.append(studio1[i])
        lst.append(movie1[i])
if len(lst)!=0:
    for i in lst:
        print(i)
else:
    print("no record found")
```