In [2]:
```
#converting given string from camel case to snake case:

def camel_to_snake(text):
        import re
        str1 = re.sub('(.)([A-Z][a-z]+)', r'\1_\2', text)
        return re.sub('([a-z0-9])([A-Z])', r'\1_\2', str1).lower()

print(camel_to_snake('PythonExercises'))
```

```
python_exercises
```

In [4]:
```
#Most frequent elements in the list


def most_frequent(List):
    counter = 0
    num = List[0]

    for i in List:
        curr_frequency = List.count(i)
        if(curr_frequency> counter):
            counter = curr_frequency
            num = i

    return num

List =input().split()
print(most_frequent(List))
```

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

In [11]:
```
# without using function:
List =input().split()
counter = 0
num = List[0]
for i in List:
    curr_frequency = List.count(i)
    if(curr_frequency> counter):
        counter = curr_frequency
        num = i
print(num)
```

```
1 2 2 2 2 2
2
```

In [14]:
```
s=input()
l=list(s)
l=list(set(l))
l.sort()
print(l[0])

```

```
sample malayalam
```

In [17]:
```
dic1 = { 4 : 'geeks', 1 : 'for', 3 : 'geeks' }

# Printing dictionary before conversion
# internaly sorted
print("Dictionary before conversion is : " + str(dic1))

# Dictionary after conversion are
# notice lost keys
print("Dictionary afer conversion is : " + str(set(dic1)))
```

```
Dictionary before conversion is : {4: 'geeks', 1: 'for', 3: 'geeks'}
Dictionary afer conversion is : {1, 3, 4}
```

In [18]:
```
li=[ 1, 2 , 3 ,4]
set(li)
```

Out[18]:
```
{1, 2, 3, 4}
```

In [35]:

```
# Print the number of digits, alphabets and any other
#www.way2sms.com
#DIGITS 1
#ALPHABETS  12
#OTHER 2

string=input("Enter string:")
count1=0
count2=0
count3=0
for i in string:
    if(i.isdigit()):
        count1=count1+1
    elif(i.isalpha()):
        count2=count2+1
    count3+=1

print("The number of digits is:")
print(count1)
print("The number of alphabets is:")
print(count2)
print("The number of characters is:")
print(count3)

```

```
Enter string:www.way2sms.com
The number of digits is:
1
The number of alphabets is:
12
The number of characters is:
15
```

In [8]:
```
# print count and sum of digits in a given string

#### test cases: 2
#### 5 ---> 1 5
#### 3 5 7 2 3  ---> 5 20
t=int(input())
for i in range(1,t+1):
    n=input()
    m=list(map(int,n.split()))

s=0
c=0
for i in m:
    s+=i
    c+=1
print(c)
print(s)
```

```
2
1 5
3 5 7 2 3
5
20
```

In [8]:
```
m="python"
m[::-1]
```

Out[8]: 'nohtyp'

In [8]:

```
# 4.Print factorial of a given number if it is a prime otherwise print power

#### test cases : 2
#### 5  --> 120
#### 4 --> 16

t=int(input())
def isPrime(n):
    for i in range(2,n):
        if(n%i==0):
            return False
    return True

def factorial(n):
    fact=1
    for i in range(1,n+1):
        fact*=i
    return fact
for k in range(1,t+1):
    n=int(input())
    if(isPrime(n)):
        result=factorial(n)
        print(result)
    else:
        print(n**2)
```

```
3
4
16
5
120
7
5040
```

In [3]:
```
# 6.Print factorial of a value if the length of a string is  prime otherwise

#### test cases : 3

#### b --> 1
#### hello -->120
#### hello python ->nohtyp olleh


def isPrime(n):
    for i in range(2,n):
        if(n%i==0):
            return False
    return True

def factorial(n):
    fact=1
    for i in range(1,n+1):
        fact*=i
    return fact
n=input()
l=len(n)
if(isPrime(l)):
    print(factorial(l))
else:
    print(n[::-1])

```

```
SRAVYA
AYVARS
```

In [17]:
```
s=input()
if(s==s[::-1]):
    print("Palindrome")
else:
    print("Not a PAlindrome")
```

```
missisipi
Not a PAlindrome
```

In [26]:
```
# Mahesh
# 1 3
# haMesh
s = input()
li = list(map(int,input().split()))
s2=s[li[0]-1:li[1]]
s2=s2[::-1]
#print(s2)
for ch in s[li[1]:]:
    s2+=ch
print(s2)
```

```
MAhesh
1 3
hAMesh
```

In [4]:
```
n=input()
m=list(map(int,n.split()))
s=0
for i in m:
    if len(str(i))==3:
        s+=i
print(s)
```

```
100 200 5 300 100 1000
700
```

In [5]:
```
print(sum(list(map(int,list(filter(lambda x:len(x)==3,input().split()))))))
```

```
100 200 5 300 100
700
```

In [6]:
```
sum([int(num) for num in input().split() if len(num)==3])
```

```
100 200 5 300 100
```

Out[6]:
```
700
```

In [12]:
```
# if user enters 400 to 500 then print great else print you need to improve

n=int(input())
if n>399 and n<501:
    print("GREAT")
else:
    print("You need to improve")
```

```
400
GREAT
```

In [15]:
```
a=False
if not a:
    print('hi')
else:
    print('u need to improve')
```

```
hi
```

Print all numbers between 1 to 100 and the num divisible by 2 and 7

[Item_Loop_Condition]

In [24]:
```
numbers=[each for each in range(1,int(input())) if each%2==0 and each%7==0]
print(numbers)
```

```
100
[14, 28, 42, 56, 70, 84, 98]
```

In [26]:
```
# x^2+y^2=z^2  i.e (3,4,5) and (6,8,10)

numbers=[(x,y,z)for x in range(1,100) for y in range(x,100) for z in range(y
print(numbers)


```

```
[(3, 4, 5), (5, 12, 13), (6, 8, 10), (7, 24, 25), (8, 15, 17), (9, 12, 15), (9,
40, 41), (10, 24, 26), (11, 60, 61), (12, 16, 20), (12, 35, 37), (13, 84, 85),
(14, 48, 50), (15, 20, 25), (15, 36, 39), (16, 30, 34), (16, 63, 65), (18, 24,
30), (18, 80, 82), (20, 21, 29), (20, 48, 52), (21, 28, 35), (21, 72, 75), (24,
32, 40), (24, 45, 51), (24, 70, 74), (25, 60, 65), (27, 36, 45), (28, 45, 53),
(30, 40, 50), (30, 72, 78), (32, 60, 68), (33, 44, 55), (33, 56, 65), (35, 84,
91), (36, 48, 60), (36, 77, 85), (39, 52, 65), (39, 80, 89), (40, 42, 58), (40,
75, 85), (42, 56, 70), (45, 60, 75), (48, 55, 73), (48, 64, 80), (51, 68, 85),
(54, 72, 90), (57, 76, 95), (60, 63, 87), (65, 72, 97)]
```

In [1]:
```
student_marks=[('sairam',[10,10,60]),('gautham',[40,50,60])]
students_dict={}
for student in student_marks:
    name=student[0]
    marks=sum(student[1])
    students_dict[name]=marks

print(students_dict)
```

```
{'sairam': 80, 'gautham': 150}
```

In [2]:
```
allmarks=students_dict.values()
max_marks=max(allmarks)
for student in students_dict:
    marks=students_dict[student]
    if marks==max_marks:
        print(student,marks)
```

```
gautham 150
```

In [ ]:
```

```