

In [10]:

```

1 A=input().split()
2 B=input().split()
3 count=0
4 for i in range(len(A)):
5     if A[i]==B[i]:
6         count=count+1
7 print(count)
8
9
10

```

```

1 1 0 1 1
1 1 0 0 0
3

```

In [12]:

```

1 li=input().split()
2 counter=0
3 num=li[0]
4 for i in li:
5     cur=li.count(i)
6     if(cur>counter):
7         counter=cur
8         num=i
9 print(num)

```

```

1 2 2 4 5
2

```

In [72]:

```

1 #Print factorial of a given number if it is a prime otherwise print power of
2 num=int(input())
3 fact=1
4 if num > 1:
5     for i in range(2,num):
6         if (num % i) == 0:
7             print(num*num)
8             break
9         else:
10            fact=fact*i
11
12 print(fact)
13
14
15
16
17

```

```

5
2
6
24

```

```
In [92]: 1 #print count and sum of digits in a given string
2 m=input()
3 n=list(map(int,m.split()))
4 c=0
5 count=0
6 for i in n:
7     c+=i
8     count+=1
9 print(c)
10 print(count)
11
12
```

```
1 2 3 4
10
4
```

```
In [2]: 1 # mahesh
2 #1 3
3 #o/p:haMesh
4 s=input()
5 li=list(map(int,input().split()))
6 s1=""
7 s2=s[li[0]-1:li[1]]
8 s2=s2[::-1]
9 for ch in s[li[1]:]:
10     s2+=ch
11 print(s2)
12
13
```

```
mahesh
1 3
hamesh
```

```
In [96]: 1 x=input()
2 if x==x[::-1]:
3     print("palin")
4 else:
5     print("not")
```

```
anee
not
```

Tuple

```
In [7]: 1 #t=() or tuple()
2 t=(12,"sdc",12.34)
3 t.count(12)
4 t.index('sdc')
5
```

```
Out[7]: 1
```

```
In [4]: 1 t[0]
        2 len(t)
```

...

Dictionary

```
In [9]: 1 myList=[]
        2 print(type(myList))
```

<class 'list'>

```
In [11]: 1 mylist=(1)# becomes int if you give one only in tuple
        2 print(type(mylist))
```

<class 'int'>

```
In [12]: 1 mylist=(1,2)
        2 print(type(mylist))
```

<class 'tuple'>

```
In [15]: 1 words={"name":"hi","branch":"cse"}
        2 print(words,type(words))
```

{'name': 'hi', 'branch': 'cse'} <class 'dict'>

```
In [16]: 1 print(words['name'])
```

hi

```
In [19]: 1
        2 words['name']='anee'
        3 print(words)
```

anee

{'name': 'anee', 'branch': 'cse'}

```
In [21]: 1 dam={'name':'aneesha','branch':'cse','name':'sravya'}
        2 print(dam)
```

{'name': 'sravya', 'branch': 'cse'}

```
In [26]: 1 dam={'name':['aneesha','sravya'],'branch':'cse'}
        2 print(dam['name'][1])
```

sravya

```
In [38]: 1 for each in dam:
        2     print(each,'----->',dam[each][1:])
```

name -----> ['sravya']

branch -----> se

```
In [29]: 1 print(dam['branch'][2])
```

e

```
In [33]: 1 for each in dam:
2         print(each, '----->', dam[each])
```

name -----> ['aneesha', 'sravya']

branch -----> cse

methods in dictionaries

```
In [ ]: 1 words={'name':'aneesha','branch':'cse'}
```

```
In [34]: 1 #dict.clear()
2         words.clear()
3         print(words)
```

{}

```
In [4]: 1 words={'name':'aneesha','branch':'cse'}
```

```
In [5]: 1 #copy()
2         newWords=words.copy()
3         print(newWords)
```

{'name': 'aneesha', 'branch': 'cse'}

```
In [39]: 1 #dict.get(key)
2         words.get('name')
```

Out[39]: 'aneesha'

```
In [41]: 1
2         print(words.get('mobile'))
```

None

```
In [7]: 1 print(newWords.get('mobile'))
2         print('hi')
```

None

hi

```
In [2]: 1 fruits=['orange','apple','mango','apple','mango','apple']
2         fruit_dict={}
3         for fruit in fruits:
4             fruit_dict[fruit]=fruit_dict.get(fruit,0)+1
5
6         print(fruit_dict)
```

{'orange': 1, 'apple': 3, 'mango': 2}

```
In [4]: 1 d={}
        2 fruits=['orange','apple','mango','apple','mango','apple']*100
        3 for fruit in fruits:
        4     d[fruit]=fruits.count(fruit)
        5 d
```

Out[4]: {'orange': 100, 'apple': 300, 'mango': 200}

```
In [6]: 1 #Len
        2 len(fruit_dict)
```

Out[6]: 3

```
In [7]: 1 for key in fruit_dict.keys():
        2     print(fruit_dict[key])
```

1
3
2

```
In [9]: 1 for key in fruit_dict.keys():
        2     print(key,fruit_dict.get(key),sep=":")
```

orange:1
apple:3
mango:2

```
In [11]: 1 for value in fruit_dict.values():
        2     print(value,end=" ")
```

1 3 2

```
In [13]: 1 fruit_dict.items()
```

Out[13]: dict_items([('orange', 1), ('apple', 3), ('mango', 2)])

```
In [18]: 1 for i in fruit_dict.items():
        2     print(*i,sep=":")
        3
        4
        5
```

orange:1
apple:3
mango:2

```
In [19]: 1 for k,v in fruit_dict.items():
        2     print(k,v,sep=":")
```

orange:1
apple:3
mango:2

```
In [20]: 1 fruit_dict.setdefault("Apple",6)
```

```
Out[20]: 6
```

```
In [21]: 1 fruit_dict
```

```
Out[21]: {'orange': 1, 'apple': 3, 'mango': 2, 'Apple': 6}
```

```
In [23]: 1 #100 5 200 300
2 n=input()
3 s=0
4 li=list(map(int,n.split()))
5 for i in li:
6     if len(str(i))==3:
7         s+=i
8 print(s)
9
```

```
100 5 300 400
800
```

```
In [ ]: 1 print(sum(list(map(int,list(filter(lambda x:len(x)==3,input().split()))))))
```

```
In [1]: 1 sum([int(num) for num in input().split() if len(num)==3])
```

```
100 5 300 400
```

```
Out[1]: 800
```

```
In [3]: 1 s=input()
2 n=int(input())
3 for i in range(1,n+1):
4     print(s,end="")
```

```
hello
2
hellohello
```

```
In [8]: 1 a=int(input())
2 if a>=400 and a<=500:
3     print("great")
4 else:
5     print("u need to improve")
6
```

```
399
u need to improve
```

```
In [9]: 1 a=False
        2 if not a:
        3     print('hi')
        4 else:
        5     print('u need 2 improve')
```

hi

```
In [17]: 1 #[item loop condition]
        2 numbers=[each for each in range(1,int(input())) if each%2==0 and each%7==0]
        3 print(numbers)
```

50

[14, 28, 42]

```
In [ ]: 1 #x^2+y^2=z^2
        2 #(3,4,5)
        3 #(6,8,10)
```

```
In [20]: 1 numbers=[(x,y,z) for x in range(1,100) for y in range(x,100) for z in range(
        2     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 [13]: 1 student_marks=[('aneesha',[10,30,70]),('sravya',[40,50,60])]
        2 students_dict={}
        3 for student in student_marks:
        4     name=student[0]
        5     marks=sum(student[1])
        6     students_dict[name]=marks
        7 print(students_dict)
```

{'aneesha': 110, 'sravya': 150}

```
In [16]: 1 all_marks=students_dict.values()
        2 max_marks=max(all_marks)
        3 for student in students_dict:
        4     marks=students_dict[student]
        5     if marks==max_marks:
        6         print(student,marks)
```

sravya 150

```
In [17]: 1 links=['www.google.com','www.gmail.com','www.gmail.com','www.eenadu.net','ww
2 for web in links:
3     if len(web)
```

```
-----
AttributeError                                Traceback (most recent call last)
<ipython-input-17-ef45a04eb9cd> in <module>
      1 links=['www.google.com','www.gmail.com','www.gmail.com','www.eenadu.ne
t','www.google.com']
----> 2 links.split()
      3 print(links)

AttributeError: 'list' object has no attribute 'split'
```

```
In [30]: 1
2
2 7 3 4
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-30-d03622a22fea> in <module>
      2 s.sort()
      3 c=0
----> 4 for i in range(0,s+1):
      5     k=i[0]-i[1]
      6 print(k)

TypeError: can only concatenate list (not "int") to list
```

```
In [ ]: 1
```