

- 1) You are given two non-empty lists representing two non-negative integers. The digits are stored in reverse order, and each of their nodes contains a single digit. Add the two numbers and return the sum as a list. You may assume the two numbers do not contain any leading zero, except the number 0 itself.

String conversion or list reversal is not allowed

Example 1:

Input: l1 = [2,4,3], l2 = [5,6,4]

Output: [7,0,8]

Explanation: 342 + 465 = 807.

Example 2:

Input: l1 = [0],

l2 = [0]

Output: [0]

Input:

l1 = [9,9,9,9,9,9],

l2 = [9,9,9,9]

Output: [8,9,9,9,0,0,0,1]

Code:

```
l1 = []
```

```
L2 = []
```

```
n1=int(input("enter no of elements in l1:"))
```

```
print("enter elements of l1")
```

```
for i in range(0,n1):
```

```
    l1.append(int(input()))
```

```
n2=int(input("enter no of elements in l1:"))
```

```
print("enter elements of l2")
```

```
for i in range(0,n2):
```

```
    l2.append(int(input()))
```

```
res=[]
```

```

if n1>n2:
    n=n2
elif n2>n1:
    n=n1
else:
    n=n1
carry=0
for i in range(0,n):
    sm=l1[i]+l2[i]

    res.append((sm+carry)%10)
    carry=sm//10
print(carry)
if n1>n2:
    for i in range(n,n1):
        res.append((l1[i]+carry)%10)
        carry=sm//10
else:
    for i in range(n,n2):
        res.append((l2[i]+carry)%10)
        carry=sm//10
if carry!=0:
    res.append(carry)
print(res)

```

2) Common Word

Given a paragraph and a list of banned words, return the most frequent word that is not in the list of banned words. It is guaranteed there is at least one word that isn't banned, and that the answer is unique. Words in the list of banned words are given in lowercase, and free of punctuation. Words in the paragraph are not case sensitive. The answer is in lowercase.

Example:

Input: paragraph = "Bob hit a ball, the hit BALL flew far after it was hit."

banned = ["hit"]

Output: "ball"

Explanation:

"hit" occurs 3 times, but it is a banned word.

"ball" occurs twice (and no other word does), so it is the most frequent non-banned word in the paragraph.

Note that words in the paragraph are not case sensitive, that punctuation is ignored (even if adjacent to words, such as "ball,"), and that "hit" isn't the answer even though it occurs more because it is banned.

Code:

```
t=""
```

```
paragraph=input("Enter para:")
```

```
for i in paragraph:
```

```
    if i.isalpha():
```

```
        t+=i.lower()
```

```
    else:
```

```
        t+=" "
```

```
words=t.split()
```

```
dict={}
```

```
for word in words:
```

```
    if word not in dict:
```

```
        dict[word]=1
```

```
    else:
```

```
        dict[word]+=1
```

```
banned=[]
```

```
n=int(input("Enter number of banned words:"))
```

```
print("enter banned words")
```

```
for i in range(0,n):  
    banned.append(input())  
for word in banned:  
    dict[word]=-1  
mx=0  
for high in dict:  
    if mx<dict[high]:  
        common=high  
        mx=dict[high]  
  
print("Common word is {}".format(common))
```