

01_20101197_Abir_Ahammed_Bhuiyan

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```
[1]: #String_1

line = input("Enter a string: ")

upper_cnt = 0
lower_cnt = 0

for char in line:
    if(char.isupper()):
        upper_cnt += 1
    else:
        lower_cnt += 1

if(upper_cnt > lower_cnt):
    print(line.upper())
else:
    print(line.lower())
```

Enter a string: H0use

HOUSE

```
[2]: #String_2

line = input("Enter a string: ")

flg_alpha = False
flg_digit = False

for char in line:
    if(char.isdigit()):
        flg_digit = True
    if(char.isalpha()):
        flg_alpha = True
```

```

if(fl_g_alpha == True and fl_g_digit == True):
    print("MIXED")
elif(fl_g_alpha):
    print("WORD")
elif(fl_g_digit):
    print("NUMBER")

```

Enter a string: jhg231j213

MIXED

```

[3]: #String_3

line = input("Enter a string: ")
new_line = ""

flg = False

for char in line:
    if(char.isupper()):
        if(flg == True):
            flg = False
        else:
            flg = True
    else:
        if(flg == True):
            new_line += char

if(len(new_line) == 0):
    print("BLANK")
else:
    print(new_line)

```

Enter a string: coDIing

BLANK

```

[4]: #String_4

line = input()

line = line.replace("too good", "excellent")

```

```
print(line)
```

The book is not too good!

The book is not excellent!

```
[5]: #String_5

line = input("Enter String: ")

line = line.split(',')

new_line = ""

for char in line[0]:
    if char in line[1]:
        new_line += char

for char in line[1]:
    if char in new_line:
        new_line += char

if(len(new_line)== 0):
    print("Nothing in common.")
else:
    print(new_line)
```

Enter String: harry, hermione

hrrhr

```
[6]: #String_6

line = input("Enter your new email: ")

new_line = ""

flg_lower = False
flg_upper = False
flg_digit = False
flg_spl = False

for char in line:

    if(char.islower()):
```

```

        flg_lower = True
    elif(char.isupper()):
        flg_upper = True
    elif(char.isdigit()):
        flg_digit = True
    elif(char in ['_', '$', '#', '@']):
        flg_spl = True

if(flg_lower == False):
    new_line += "Lowercase character missing, "
if(flg_upper == False):
    new_line += "Uppercase character missing, "
if(flg_digit == False):
    new_line += "Digit missing, "
if(flg_spl == False):
    new_line += "Special character missing, "

if(flg_lower == True and flg_upper == True and flg_digit == True and flg_spl ==
↪True):
    print("OK")
else:
    print(new_line[:-2])

```

Enter your new email: ohMyBR@CU

Digit missing

```

[7]: #List_1

sil = []

while True:
    var = input()
    if(var=="STOP"):
        break;
    else:
        sil.append(var)

new_silt = []

for i in sil:
    if i not in new_silt:
        new_silt.append(i)

```

```

for value in new_silt:
    count=0
    for i in sil:
        if value==i:
            count+=1

    print(str(value)+"-"+str(count)+" times")

```

```

10
20
20
30
10
50
90
STOP

10-2 times
20-2 times
30-1 times
50-1 times
90-1 times

```

```

[8]: #List_2

cnt = int(input())

def adder(sil):
    add = 0
    for elem in sil:
        add+=elem

    return add

max_sil = []

for i in range(4):
    sil = [int(i)for i in input().split(" ")]

    if(adder(sil)>adder(max_sil)):
        max_sil = sil

```

```
print(adder(max_sil))
print(max_sil)
```

```
4
1 2 3
4 5 6
10 11 12
7 8 9
```

```
33
[10, 11, 12]
```

[9]: *#List_3*

```
sil1 = [int(i) for i in input().split(" ")]
sil2 = [int(i) for i in input().split(" ")]
```

```
mul_sil = []
```

```
for elem1 in sil1:
    for elem2 in sil2:
        mul_sil.append(elem1*elem2)
```

```
print(mul_sil)
```

```
2 3 6
3 4 5
```

```
[6, 8, 10, 9, 12, 15, 18, 24, 30]
```

[10]: *#List_4*

```
def exact_sil(sil):
    exac = []
    for i in range(len(sil)-1):
        exac.append(i+1)

    return exac

def absolute_diff_sil(sil):
    diff_sil = []

    for i in range(len(sil)-1):
        diff_sil.append(abs(sil[i]-sil[i+1]))
```

```
return diff_sil
```

```
while True:
    line = input()
    if(line=="STOP"):
        break
    else:
        sil = [int(i) for i in line.split(" ")]
        diff_sil = absolute_diff_sil(sil)
        exac_sil = exact_sil(sil)
        if(set(exac_sil)==set(diff_sil)):
            print("UB Jumper")
        else:
            print("Not UB Jumper")
```

1 4 2 3

UB Jumper

2 1 4 6 10

UB Jumper

1 4 2 -1 6

Not UB Jumper

STOP

[11]: #List_5

```
line = input()

def joiner(string, sil):
    for char in sil:
        string += char

    return string

def odd_even_filler(num_sil):
    for char in num_sil:
        if(int(char)%2 == 0):
            num_even_sil.append(char)
        else:
```

```

        num_odd_sil.append(char)

upper_sil = []
lower_sil = []
num_sil = []
num_odd_sil = []
num_even_sil = []

for char in line:
    if(char>='a' and char<='z'):
        lower_sil.append(char)
    if(char>='A' and char<='Z'):
        upper_sil.append(char)
    if(char>='0' and char<='9'):
        num_sil.append(char)

odd_even_filler(num_sil)

upper_sil.sort()
lower_sil.sort()
num_even_sil.sort()
num_odd_sil.sort()

line = ""

line = joiner(line, lower_sil)
line = joiner(line, upper_sil)
line = joiner(line, num_odd_sil)
line = joiner(line, num_even_sil)

print(line)

```

Bracu1234

acruB1324

```

[13]: #List_6

n, k = map(int, input().split(' '))

sil = [int(i)for i in input().split(' ')]

```



```

diff_sil = []

for elem in sil:
    if(5-elem >= k):
        diff_sil.append(5-elem)

print(int(len(diff_sil)/3))

```

```

5 2
0 4 5 1 0

```

1

```

[14]: #dictionary_&_tuple_1

def dict_maker(string):
    sil = string.split(",")

    dic = dict()

    for elem in sil:
        lis = elem.split(":")
        dic[lis[0].lstrip()] = int(lis[1])

    return dic

dic_1 = dict_maker(input())
dic_2 = dict_maker(input())

dic_3 = dict()

dic_3 = {**dic_1, **dic_2}

for key, value in dic_3.items():
    if key in dic_1 and key in dic_2:
        dic_3[key] = dic_1[key] + dic_2[key]

dic_tup = ()

for value in dic_3.values():
    if value not in dic_tup:

```

```

        dic_tup+=(value,)

print(dic_3)
print("Values:", tuple(sorted(dic_tup)))

```

```

a: 100, b: 100, c: 200, d: 300
a: 300, b: 200, d: 400, e: 200
{'a': 400, 'b': 300, 'c': 200, 'd': 700, 'e': 200}
Values: (200, 300, 400, 700)

```

```

[16]: #dictionary_&_tuple_2

dic = dict()

while True:
    n = input()

    if(n == "STOP"):
        break
    else:
        if(int(n) in dic):
            dic[int(n)] += 1
        else:
            dic[int(n)] = 1

for key, value in dic.items():
    print(key, "-", value, "times")

```

```

10
20
20
30
10
50
90
STOP

10 - 2 times
20 - 2 times
30 - 1 times
50 - 1 times
90 - 1 times

```

```

[17]: #dictionary_&_tuple_3

def dict_maker(string):

```

```

sil = string.split(",")

dic = dict()

for elem in sil:
    lis = elem.split(":")
    dic[lis[0].lstrip()] = lis[1].lstrip()

return dic

dic_1 = dict_maker(input())

dic_2 = dict()

for key, value in dic_1.items():
    if(value not in dic_2):
        dic_2[value] = []
        dic_2[value].append(key)
    else:
        dic_2[value].append(key)

print(dic_2)

```

```

key1: value1, key2: value2, key3: value1
{'value1': ['key1', 'key3'], 'value2': ['key2']}

```

[18]: *#dictionary & tuple_4*

```

line1 = input()
line2 = input()

def to_dic(string):
    dic = dict()
    for char in string:
        if(char in dic):
            dic[char] += 1
        else:
            dic[char] = 1

    return dic

line1_dic = to_dic(line1)

```

```

line2_dic = to_dic(line2)

flg = False

for key, value in line1_dic.items():
    if(key in line2_dic and line1_dic[key]==line2_dic[key]):
        pass
    else:
        flg = True

for key, value in line2_dic.items():
    if(key in line1_dic and line2_dic[key]==line1_dic[key]):
        pass
    else:
        flg = True

if(flg == True):
    print("Those strings are not anagrams.")
else:
    print("Those strings are anagrams.")

#try using full and llufer

```

```

evil
live

```

Those strings are anagrams.

[19]: *#dictionary_&_tuple_5*

```

dic = { 1: ['.', ',', '?', '!', ':'],
        2: ['A', 'B', 'C'],
        3: ['D', 'E', 'F'],
        4: ['G', 'H', 'I'],
        5: ['J', 'K', 'L'],
        6: ['M', 'N', 'O'],
        7: ['P', 'Q', 'R', 'S'],
        8: ['T', 'U', 'V'],
        9: ['W', 'X', 'Y', 'Z'],
        0: [" "] }

```

```

line = input()
line = line.upper()

```

```
new_line = ""
```

```
for char in line:  
    for key, value in dic.items():  
        if char in dic[key]:  
            for i in range(dic[key].index(char)+1):  
                new_line+=str(key)
```

```
print(new_line)
```

Hello, World!

4433555555666110966677755531111

[]: