

creating tuple from ziping two tuple summing element

```
In [ ]: 1 t1=1,2,3
        2 t2=4,5,6
        3 new = tuple(x+y for x,y in zip(t1,t2))
        4 print(new)
```

write a program for the following task:

- input :1+2+3+1+5+1+1+2+3+1
- output:1+1+1+1+1+2+2+3+3+5

```
In [ ]: 1 s="1+2+3+1+5+1+1+2+3+1"
        2 m=s.split("+")
        3 "+".join(sorted(m))
```

write a program to validate a password

- it should contain atleast 8 element
- it should contain atleast 1 uppercase letter
- it should contain atleast 1 digit
- it should contain atleast 1 specific character fro @, _ and \$

if above condition are not satisfied it should return not valid

```
In [4]: 1 password=input("enter your pass:")
        2 l,u,p,d=0,0,0,0
        3 if len(password)>=8 :
        4     for i in password:
        5         if i.isupper():
        6             u+=1
        7         if i.islower():
        8             l+=1
        9         if i.isdigit():
        10            d+=1
        11         if i in "@_ $":
        12            p+=1
        13     if l>=1 and u>=1 and d>=1 and p>=1 and l+u+p+d==len(password):
        14         print("valid")
        15     else:
        16         print("not valid")
        17 else:
        18     print("not valid")
```

enter your pass:Dwarkesh@123
valid

Wap to Encrypt given string

In [10]:

1

DEF

In [13]:

```

1 s=input("enter ")
2 ans=""
3 k=3
4 for i in s:
5     if(i!=" "):
6         shift = ord(i) + 3
7         if shift > ord('Z'):
8             shift -= 26
9         ans += chr(shift)
10    else:
11        ans+=" "
12 print(ans)

```

enter ABC XYZ

DEF ABC

- input :Indu business Machin
- output:IBM

In [16]:

```

1 s="LJIET ENG"
2 words = s.split()
3 ans = ''.join(i[0] for i in words)
4 print(ans)

```

LE

wrt to check if the given two string are balanced . the string s1 and s2 are balanced if the element of s1 are in s2 (in any order)

input- s1=lk s2=ljku

output- balanced

In [20]:

```

1 s1 = "lk"
2 s2 = "ljku"
3
4 if set(s1) <= set(s2):
5     print("balanced")
6 else:
7     print("not balanced")
8

```

not balanced

```
In [23]: 1 s1 = "lk"
2 s2 = "ljku"
3
4 balanced = all(char in s2 for char in s1)
5 if balanced:
6     print("balanced")
7 else:
8     print("not balanced")
9
```

balanced

```
In [24]: 1 s1 = "lk"
2 s2 = "ljku"
3
4 balanced = True
5 for char in s1:
6     if char not in s2:
7         balanced = False
8         break
9
10 if balanced:
11     print("balanced")
12 else:
13     print("not balanced")
14
```

balanced

wrt program for a given email address extract the username

- input - mvp.mvp@gmail.com (<mailto:mvp.mvp@gmail.com>)
- output - mvp.mvp

```
In [29]: 1 email = "mvp.mvp@gmail.com"
2 abc=email.split('@')
3 username = abc[0]
4
5 print(username)
6
```

mvp.mvp

wrt for a given string perform following task

- input- aaabbccddsa
- output-a3b2c2d2sa

```
In [30]: 1 s = "aaabbccddsa"
          2
          3 result = ""
          4 i = 0
          5 while i < len(s):
          6     count = 1
          7     while i + 1 < len(s) and s[i] == s[i + 1]:
          8         i += 1
          9         count += 1
         10     if count > 1:
         11         result += s[i] + str(count)
         12     else:
         13         result += s[i]
         14     i += 1
         15
         16 print(result)
         17
```

a3b2c2d2sa

```
In [ ]: 1
```