substrate, product=input('반응물 입력, ex)2S2O3(-2) + I2(0), input('생성물 입력, ex)S406(-2) + 2I(-1)')

A=input('어떤 원소를 알고 싶나요?')

substrate.split()

product.split()

before=[]

after=[]

mat=[]

temp=''

for i in substrate:

if A in i:

pass

else:

continue

if i[-3]=='(':

mat[0]=0

i=i[-3]

else:

mat[0]=i[-3:-1]

i=i[:-4]

for j in i:

if j.isupper() and temp=='':

temp=j

elif j.islower():

temp=temp.j

elif j.isdigit() and temp!='':

mat.append(temp)

temp=''

mat.append(i)

elif j.isupper() and temp!='':

mat.append(temp)

mat.append(1)

temp=''

if temp!='':

mat.append(temp)

temp=''

before.append(mat)

mat=[]

for i in product:

if A in i:

pass

else:

continue

if i[-3]=='(':

mat[0]=0

i=i[-3]

else:

mat[0]=i[-3:-1]

i=i[:-4]

for j in i:

if j.isupper() and temp=='':

temp=j

elif j.islower():

temp=temp.j

elif j.isdigit() and temp!='':

mat.append(temp)

temp=''

mat.append(i)

elif j.isupper() and temp!='':

mat.append(temp)

mat.append(1)

temp=''

if temp!='':

mat.append(temp)

temp=''

after.append(mat)

mat=[]

alkali metal=[Li,Na,K,Rb,Cs,Fr]

alkaline earth metal=[Be,Mg,Ca,Sr,Ba,Ra]

befsan=[]

afsan=[]

san=[]

for i in before:

for j in i:

if j.isdigit():

continue

else:

if len(i)==3:

san.append(0)

befsan.append(san)

san=[]

else:

try: