TP 7 : Slicing - Corrigé

2 BCPST 2 - TP Informatique

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#%%


def slicing(s):
    m = ""; L = []

    for c in s :

        if c == ",":
            L.append(m)
            m = ""

        else :
            m += c

    L.append(m)
    return L
#%%

def liste_nombres(s):
    m = ""; L = []

    for c in s :

        if c == ",":
            L.append(int(m))
            m = ""

        else :
            m += c

    L.append0(int(m))
    return L
#%%

def calcul1(s):
    m = ""; somme = 0

    for i in s:
        if i == "+":
            somme += int(m)
            m = ""
        else :
            m += i

    somme += int(m)
    return somme

s = "15+1+125"
print(calcul1(s))
```

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#%%

def calcul2(s):
    m = ""; somme = 0; signe = 1

    for i in s:
        if i == "+":
            somme += signe*int(m)
            signe = 1
            m = ""
        elif i == "-":
            somme += signe*int(m)
            signe = -1
            m = ""
        else :
            m += i

    somme += signe*int(m)
    return somme

s = "15+1-125+100-20"
print(calcul2(s))
```

```
#%%
def calcul3(s):
    m = ""; s1 = ""; produit = False; p = 1
    for i in s:
        if i == "*":
            p *= int(m)
            produit = True
            m = ""

        elif i == "+" or i =="-":

            if(produit):
                p *= int(m)
                s1 += str(p)
                p = 1

            else:
                s1 += m

            m = ""
            s1 += i
            produit = False

        else :
            m += i

    if(produit):
        p *= int(m)
        s1 += str(p)

    else:
        s1 += m

    return calcul2(s1)


print(calcul3("2*3*2+5-9*2"))
```

```
#%%
def calcul_liste_puissance(L):
    print(L)
    p = L[-1]
    for i in range(2,len(L)+1) :
        p = L[-i]**p
    return p

def calcul4(s):
    m = ""; s1 = "";  L = []; passe = False

    for i in range(len(s)):
        if(passe):
            passe = False

        else:
            if s[i] == "*" and s[i+1] == "*":
                L.append( int(m) )
                puissance = True
                m = ""
                passe = True

            elif s[i] == "+" or s[i] =="-" or s[i] =="*":

                if(puissance):
                    L.append( int(m) )

                    p = calcul_liste_puissance(L)

                    s1 += str(p)
                    L = []

                else:
                    s1 += m

                m = ""
                s1 += s[i]
                puissance = False

            else :
                m += s[i]


    if(puissance):
        L.append( int(m) )

        p = calcul_liste_puissance(L)

        s1 += str(p)
        L = []

    else:
        s1 += m

    return calcul3(s1)


print(calcul4("2**3**2+3*10-25-9**2"))

#%%
```