

## Codes du TP2

```
import numpy as np
```

```
#Exercice 3.1
```

```
def suite1(n):  
    return np.sqrt(n+3)
```

```
# Exercice 3.2
```

```
def f(x):  
    y=np.sqrt(np.abs(x))*np.exp(x)+2  
    return y
```

```
def g(x):  
    y= np.log(f(x))+4  
    return y
```

```
# Exercice 4.1
```

```
def discrim(a,b,c):  
    delta=b**2-4*a*c  
    return delta
```

```
def racP(a,b,c):  
    delta=discrim(a,b,c)  
    xPlus=(-b+np.sqrt(delta))/(2*a)  
    xMoins=(-b-np.sqrt(delta))/(2*a)  
    return xPlus, xMoins
```

```
#Exercice 4.2
```

```
def racSomProd(a,b,c):  
    v1,v2=racP(a,b,c)  
    S=v1+v2  
    P=v1*v2  
    return S,P
```

```
# Exercice 4.3
```

```
def pythagore(a,b,c):  
    return a**2 == b**2+c**2 #on part du postula que a est l'hypotenuse  
    #il faudra utiliser une boucle if pour commencer par determiner le plus grand cote
```