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## Session d'exercices – Récursivité

### Question 1

Qu'est-ce que ce programme affiche ?

```
def f(t1, t2, n):
    if (n < 2):
        return 0
    else:
        if (t1[n] <= t2[n]):
            return f(t1, t2, n-1)
        else:
            return 1 + f(t1, t2, n-1)

t1 = [1,2,0,0,2,3,0,0,3,4,0,0]
t2 = [1,0,0,0,3,0,0,0,4,0,0,0]

print(f(t1,t2, len(t1) - 1))
```

Listing 1: (a)

Listing 2: (b)

Listing 3: (c)

Listing 4: (d)

### Question 2

Qu'est-ce que ce programme affiche ?

```
lst1 = []
lst2 = []

def function(n):
    if n >= 1:
        lst1.insert(0, n**2)
        return function(n-1)
    else:
        return lst1

def function2(t):
    if len(t) >= 1:
        lst2.append(t)
        return function2(t[:-1])
    else:
        return lst2

print(function2(function(3)))
```

Listing 5: (a)

Listing 6: (b)

Listing 7: (c)

Listing 8: (d)