

2025 sujet 43

Exercice 1

```
def couples_consecutifs(tab):  
    s = []  
    for i in range(len(tab) - 1):  
        if tab[i+1] - tab[i] == 1:  
            s.append((tab[i], tab[i+1]))  
    return s
```

Exercice 2

```
def colore_comp1(M, i, j, val):  
    if M[i][j] != 1:  
        return  
  
    M[i][j] = val  
  
    if i-1 >= 0: # propage en haut  
        colore_comp1(M, i-1, j, val)  
    if i+1 < len(M): # propage en bas  
        colore_comp1(M, i+1, j, val)  
    if j-1 >= 0: # propage à gauche  
        colore_comp1(M, i, j-1, val)  
    if j+1 < len(M[i]): # propage à droite  
        colore_comp1(M, i, j+1, val)
```