

2022 sujet 11

Exercice 1

```
def recherche(tab, n):
    deb = 0
    fin = len(tab) - 1
    mil = (fin + deb) // 2
    while deb <= fin:
        if tab[mil] == n:
            return mil
        elif tab[mil] < n:
            deb = mil + 1
        else:
            fin = mil - 1
        mil = (fin + deb) // 2
    return -1
```

Exercice 2

```
ALPHABET='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
```

```
def position_alphabet(lettre):
    return ALPHABET.find(lettre)

def cesar(message, decalage):
    resultat = ''
    for lettre in message :
        if lettre in ALPHABET :
            indice = (position_alphabet(lettre) + decalage) % 26
            resultat = resultat + ALPHABET[indice]
        else:
            resultat = resultat + lettre
    return resultat
```