

Devoir 2

exercice 1

1.

δ	a	b	B
q_0	(q_1, a, D)	(q_0, b, D)	(q_f, B, G)
q_1	(q_0, a, D)	(q_1, b, D)	

2. aaaa

3. bbbbb

Exercie 2

2.

Algorithm 1 Tri par comptage

```
1: function TRICOMPTAGE(tab[ ]: tableau[1..n] d'entier, n: entier)
2:   min  $\leftarrow$  tab[1]
3:   max  $\leftarrow$  tab[1]
4:   for i  $\leftarrow$  2 to n do // Initialisation de min et max
5:     if tab[i] < min then
6:       min  $\leftarrow$  tab[i]
7:     end if
8:     if tab[i] > max then
9:       max  $\leftarrow$  tab[i]
10:    end if
11:  end for
12:  tabComptage  $\leftarrow$  [ ]
13:  for i  $\leftarrow$  1 to max - min + 1 do // Initialisation de tabComptage
14:    tabComptage[i]  $\leftarrow$  0
15:  end for
16:  for i  $\leftarrow$  1 to n do // Remplit tabComptage
17:    tabComptage[tab[i] - min + 1]  $\leftarrow$  tabComptage[tab[i] - min + 1] + 1
18:  end for
19:  i  $\leftarrow$  1
20:  for k  $\leftarrow$  1 to max - min + 1 do // Arrange tab
21:    for j  $\leftarrow$  1 to tabComptage[k] do
22:      tab[i]  $\leftarrow$  k + min - 1
23:      i  $\leftarrow$  i + 1
24:    end for
25:  end for
26:  return tab
27: end function
```
