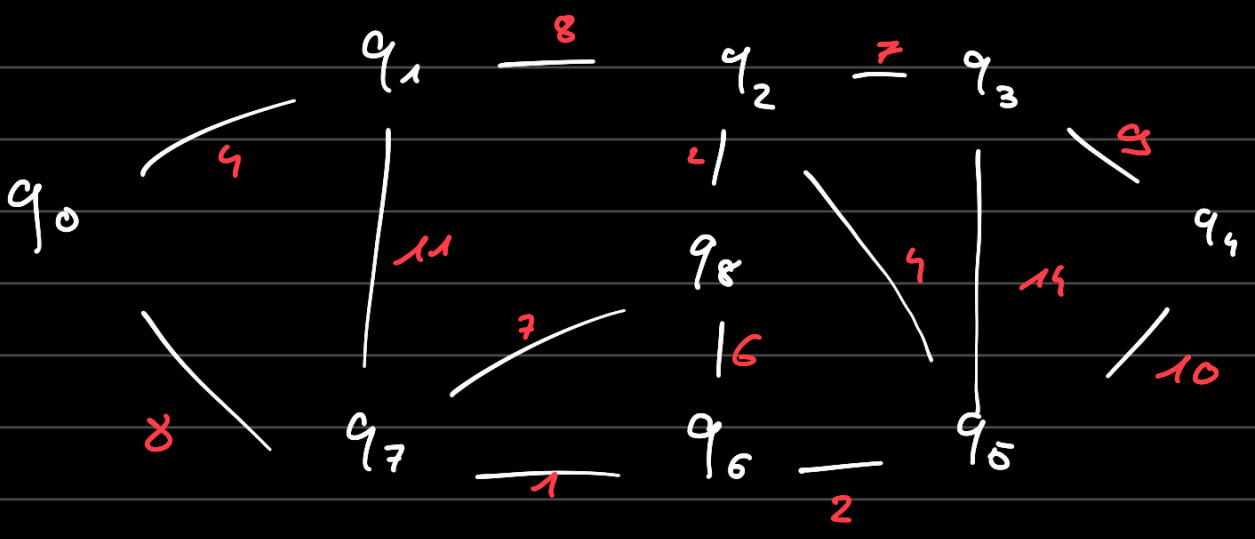
Exercice 1 :

1)



q_0	q_1	q_2	q_3	q_4	q_5	q_6	q_7	q_8
0	4	12	19	21	11	9	8	14

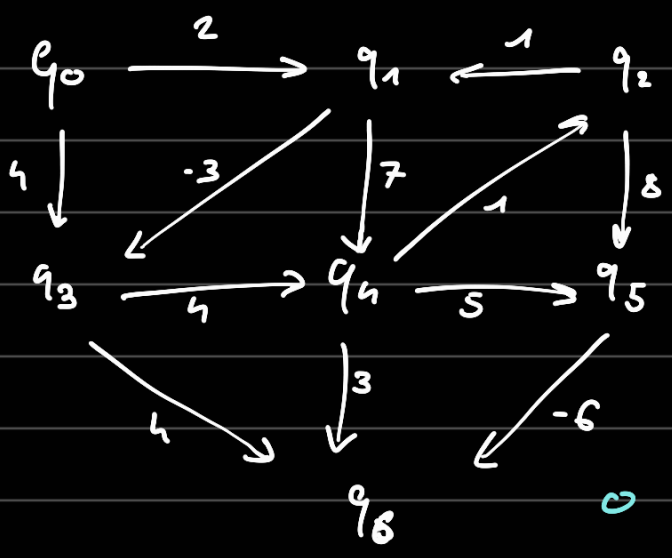
Exercice 2 :

1)

q_0	q_1	q_2	q_3	q_4	q_5	q_6	q_7	q_8
0	~~∞~~	~~∞~~	∞	∞	∞	~~∞~~	~~∞~~	∞
	4_0	12_1	~~25_5~~ 19_2	21_4	11_6	9_7	8_0	~~15_7~~ 14_2

$D = [0, 4, 12, 19, 21, 11, 9, 8, 14]$

2)



0 2 4 -1 3 8 2

0	1	2	3	4	5	6
0	~~∞~~	∞	~~∞~~	~~∞~~	~~∞~~	∞
	2_0	4_4	4_0	~~7_4~~	8_4	3_2
			-1_1	3_3		

On voit déjà le problème car on avait dit que la distance est trop grande.

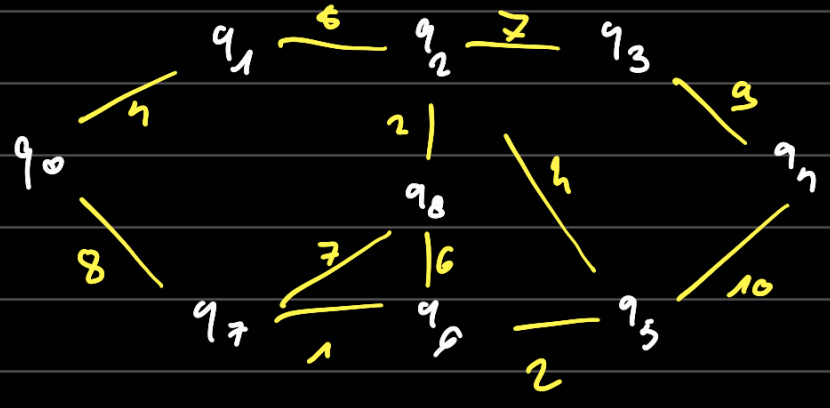
Si on a un cycle négatif alors la plus courte distance ne sera jamais atteinte.

Exercice 4 :

```
Dijk_var(G, s):
    dist(s) = 0
    pour tout v ∈ V:
        pere(v) = Null
        visite(v) = False
    visite(s) = True
    pere(s) = s
    cpt = 0
    u = s
```

Ex 2 :

1)



D : q_0 q_1 q_2 q_3 q_4 q_5 q_6 q_7 q_8

0 ~~∞~~ ~~∞~~ ~~∞~~ ~~∞~~ ~~∞~~ ~~∞~~ ~~∞~~ ~~∞~~ ~~∞~~

4_0 17_1 13_2 28_3 16_2 9_7 8_0 14_2