

known:

MQO: i

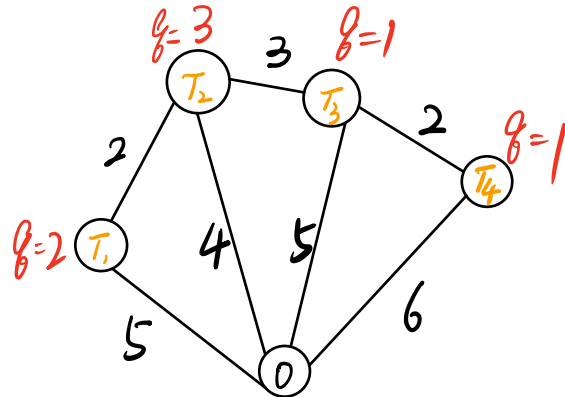
$Q=5$

val: $f(T_i) + d_{0,T_{i+1}} - Sum^{i+1}$

Sum : 0 5 7 10 12 18
Load : 0 2 5 6 7 0

MQO : 0
val : 0

$f(T_0) = 0$
 $f(T_1) = 10$



MQO : 0
val : 0 $f(T_1) + d_{0,T_2} - Sum^2 = 10 + 4 - 7 = 7$

$f(T_2) = \begin{cases} f(T_1) + d_{1,2} - d_{T_2,0} = 18 \text{ (X)} \\ f(T_0) + d_{0,T_1} + (Sum^2 - Sum^1) + d_{T_2,0} = 11 \text{ (V)} \end{cases}$
18 > 11

MQO : ~~0~~ 1
val : ~~0~~ 7

Load⁶ - Load⁰ > Q

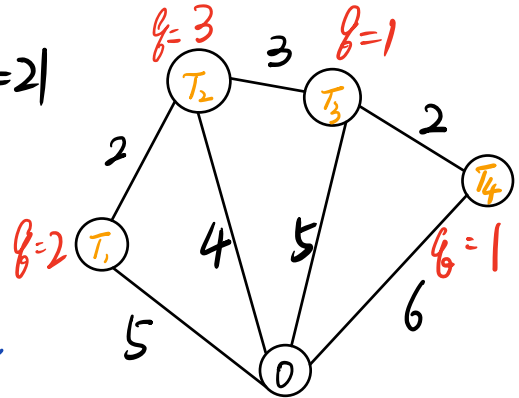
MQO : ~~1~~ 2
val : ~~7~~ $f(T_2) + d_{0,T_3} - Sum^3 = 11 + 5 - 10 = 6$

6 < 7

$$f(T_3) = \begin{cases} f(T_2) + d_{0,T_3} + d_{T_3,0} = 21 \\ f(T_2) + d_{0,T_3} + 0 + d_{T_3,0} = 21 \end{cases}$$

$$MQD: \quad 2 \quad 3$$

$$\begin{aligned} Val: \quad 6 \quad & f(T_3) + d_{0,T_4} - Sum^4 \\ & = 21 + 6 - 12 = 15 \end{aligned}$$



$$\begin{aligned} f(T_4) = \begin{cases} f(T_3) + d_{0,T_4} + d_{T_4,0} = 33 \quad (X) \\ f(T_2) + d_{0,T_3} + (Sum^4 - Sum^3) + d_{T_4,0} \\ = 11 + 5 + 2 + 6 = 24 \quad (V) \end{cases} \end{aligned}$$

$$\boxed{33 > 24}$$

Answer: 24

$$\text{Opt Path: } \begin{cases} 0, T_1, T_2, 0 \\ 0, T_3, T_4, 0 \end{cases}$$