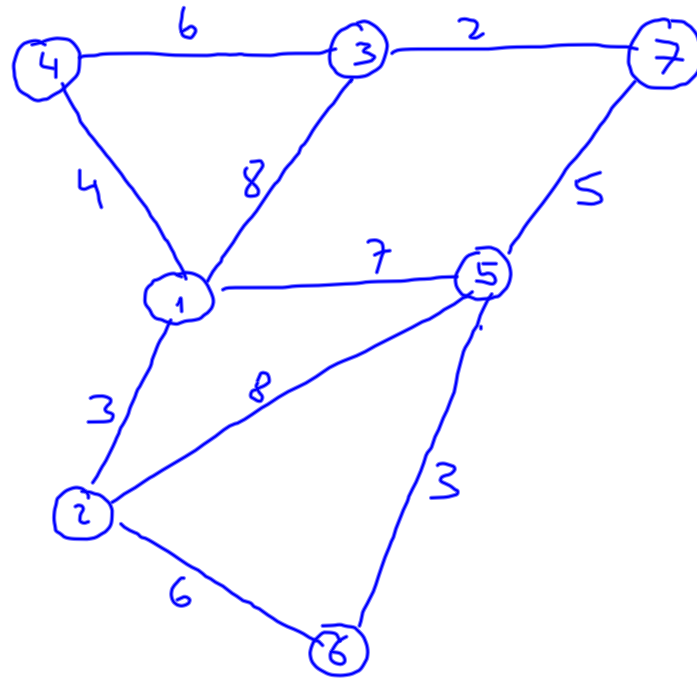
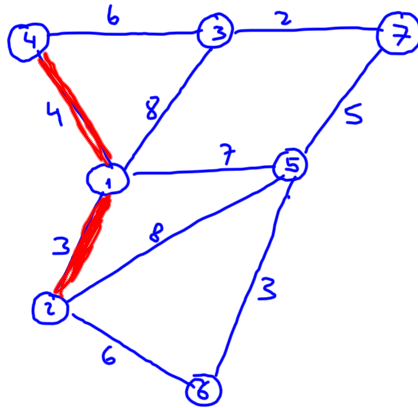


Aplicatie Să se simuleze alq. Dijkstra și Prim pe următorul graf luând ca nod de plecare nodul 1.





$k=2$

i	1	2	3	4	5	6	7
D	0	3	8	4	7	2 9	∞
vis	1	0	0	0	0	0	0
T	0	1	1	1	1	2	1

$k=4$

i	1	2	3	4	5	6	7
D	0	3	8	4	7	9	∞
vis	1	1	0	0	0	0	0
T	0	1	1	1	1	2	1

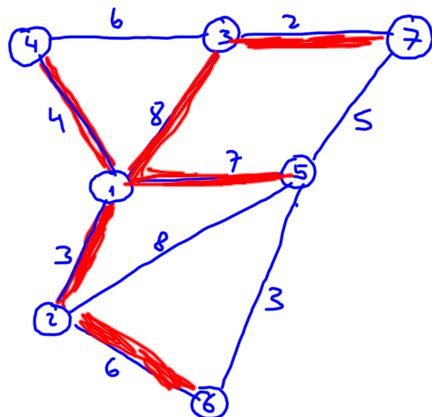
$$D[2] + \text{cost}(2, *) < D[*]$$

$$D[2] + \text{cost}(2, 5) < D[5]: 3 + 8 < 7$$

$$D[2] + \text{cost}(2, 6) < D[6]: 3 + 6 < \infty \checkmark$$

$$D[4] + \text{cost}(4, *) < D[*]$$

$$D[4] + \text{cost}(4, 3) < D[3] \text{ NU.}$$



$$k=5$$

i	1	2	3	4	5	6	7
D	0	3	8	4	7	9	12
vis	1	1	0	1	0 1	0	0
T	0	1	1	1	1	2	5

$k=5$

$$D[5] + \text{cost}(5, *) < D[*] \quad \begin{aligned} &\rightarrow \text{cost}(5, 6) < 9 \\ &7 + \text{cost}(5, 7) < \infty \quad \checkmark \end{aligned}$$

$$k=3$$

i	1	2	3	4	5	6	7
D	0	3	8	4	7	9	12 10
vis	1	1	0 1	1	1	0	0
T	0	1	1	1	1	2	5 3

$$D[3] + \text{cost}(3, 7) < D[7] \quad \checkmark$$

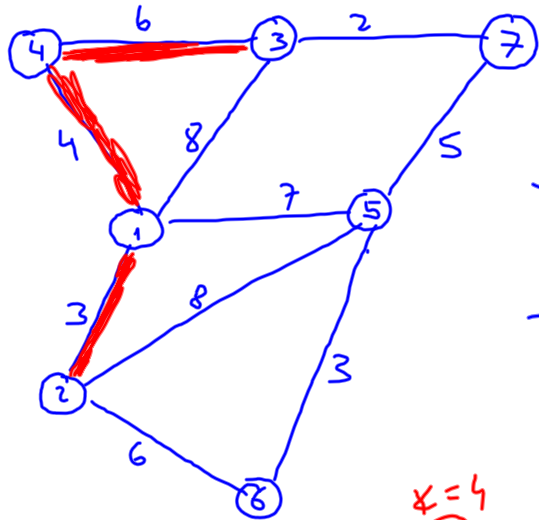
$$k=6$$

i	1	2	3	4	5	6	7
D	0	3	8	4	7	9	10
vis	1	1	1	1	1	0 1	0 1
T	0	1	1	1	1	2	3

la final se alege $k=7$.

Suma tuturor muchilor

alere: 30



Alg. Pctm

i	1	2	3	4	5	6	7
D	0	3	8	4	7	6	∞
vis	1	0 1	0	0	0	0	0
T	0	1	1	1	1	1 2	1

$k=2$

$\text{cost}(2,*) < D[*]$

~~$\text{cost}(2,5) < D[5]$~~

$\text{cost}(2,6) < D[6] \checkmark$

i	1	2	3	4	5	6	7
D	0	3	8 6	4	7	6	∞
vis	1	1	0	0 1	0	0	0
T	0	1	1 4	1	1	2	1

$k=4$

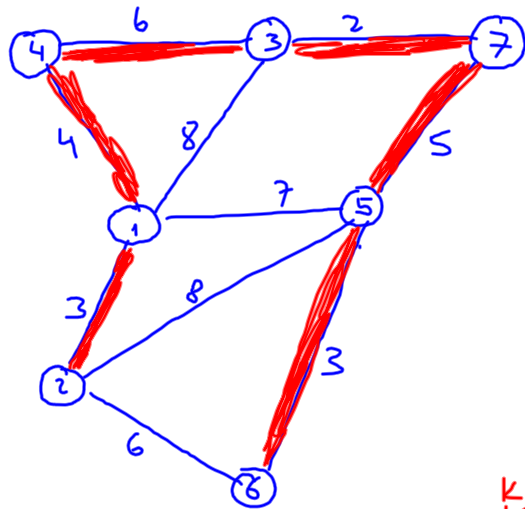
$\text{cost}(4,*) < D[*]$

$\text{cost}(4,3) < D[3] \checkmark$

i	1	2	3	4	5	6	7
D	0	3	6	4	7	6	∞ 2
vis	1	1	0 1	1	0	0	0
T	0	1	4	1	1	2	1 3

$k=3$

$\text{cost}(3,*) < D[*] \checkmark$



i	1	2	3	4	5	6	7	k=7
D	0	3	6	4	7 5	6	2	
vis	1	1	1	1	0	0	0 1	
T	0	1	4	1	1 7	2	3	

$$\text{cost}(7, 5) < D[5] \checkmark$$

$$\text{cost}(5, 6) < D[6] \checkmark$$

i	1	2	3	4	5	6	7	k=5
D	0	3	6	4	5	3 6	2	
vis	1	1	1	1	0 1	0	1	
T	0	1	4	1	7	2 5	3	

cost total: 23

