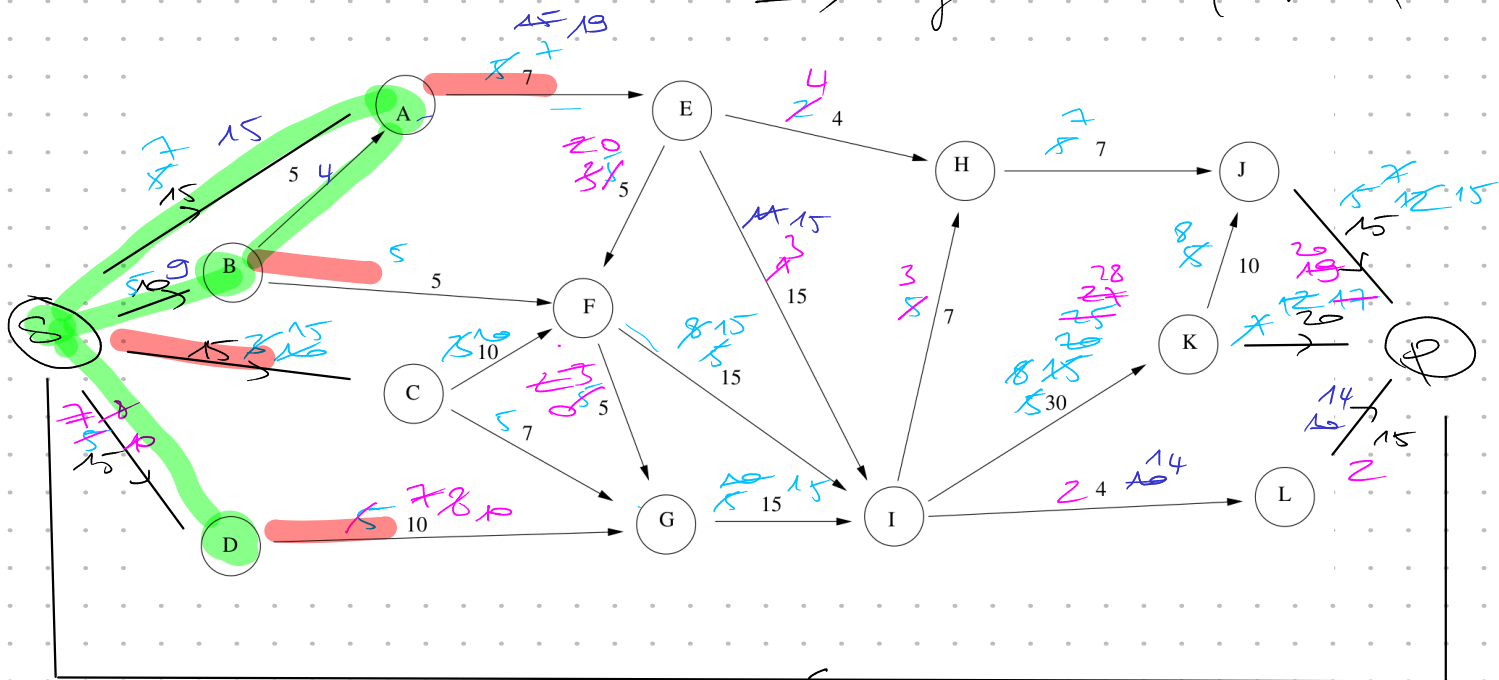


Ex 1

But : flot max de la source

\Rightarrow algo de FF à partir du flot nul



~~4345 37353432 222151245~~

- E₁ : $\mu = \{S A E F G I H J P\}$ $\delta = 5$ $\phi = 5$
- E₂ : $\mu = \{S A E H J P\}$ $\delta = 2$ $\phi = 7$
- E₃ : $\mu = \{S B F I K J P\}$ $\delta = 5$ $\phi = 12$
- E₄ : $\mu = \{S C F I K J P\}$ $\delta = 3$ $\phi = 15$
- E₅ : $\mu = \{S C F I K P\}$ $\delta = 7$ $\phi = 22$
- E₆ : $\mu = \{S C G I K P\}$ $\delta = 5$ $\phi = 27$
- E₇ : $\mu = \{S D G I K P\}$ $\delta = 5$ $\phi = 32$
- E₈ : $\mu = \{S D G F E H I K P\}$ $\delta = 2$ $\phi = 34$
- E₉ : $\mu = \{S D G F E I K P\}$ $\delta = 1$ $\phi = 35$
- E₁₀ : $\mu = \{S D G F E I L P\}$ $\delta = 2$ $\phi = 37$
- E₁₁ : 1^{er} de de- de S \rightarrow P $\Rightarrow \phi_{max} = 37$

optimalité

$$V = \{s; A; B; D\}$$

$$E = \{(SC), (AE), (BF), (DC)\}$$

$$c(E) = 15 + 7 + 5 + 10 = 37$$

$$= \phi_{\max}$$

$$\Rightarrow \boxed{\phi^* = 37}$$

$$2) \begin{pmatrix} c(A, B, C, D) = 55 \\ c(J, K, L) = 50 \end{pmatrix} \rightarrow$$

$$c(AE) = 7$$

$$\mu = \{s, A, E, I, L, p\} \rightarrow \delta = 8 \Rightarrow \phi = 45 \\ \Rightarrow c(AE) = 15 \\ c(IL) = (4-2) + 8 = 10$$

$$\mu = \{s, B, A, E, I, L, p\} \rightarrow \delta = 4 \Rightarrow \phi = 45$$

$$\Rightarrow c(AE) = 13$$

$$\Rightarrow c(IL) = 14$$

\rightarrow ici (EI) p. bloque

3) on doit (AE) car de la cage.

$$\Rightarrow +2 \quad (\text{coulée sur IL})$$

$$\Rightarrow \phi_{\max} = 39 \\ (c(AE) = 9)$$

Elo2

Sommets $\begin{cases} \text{Candidate} \\ \text{Route} \end{cases}$ (Bi-parti)

arcs : sphere Candidate / Route \Rightarrow Global administrations

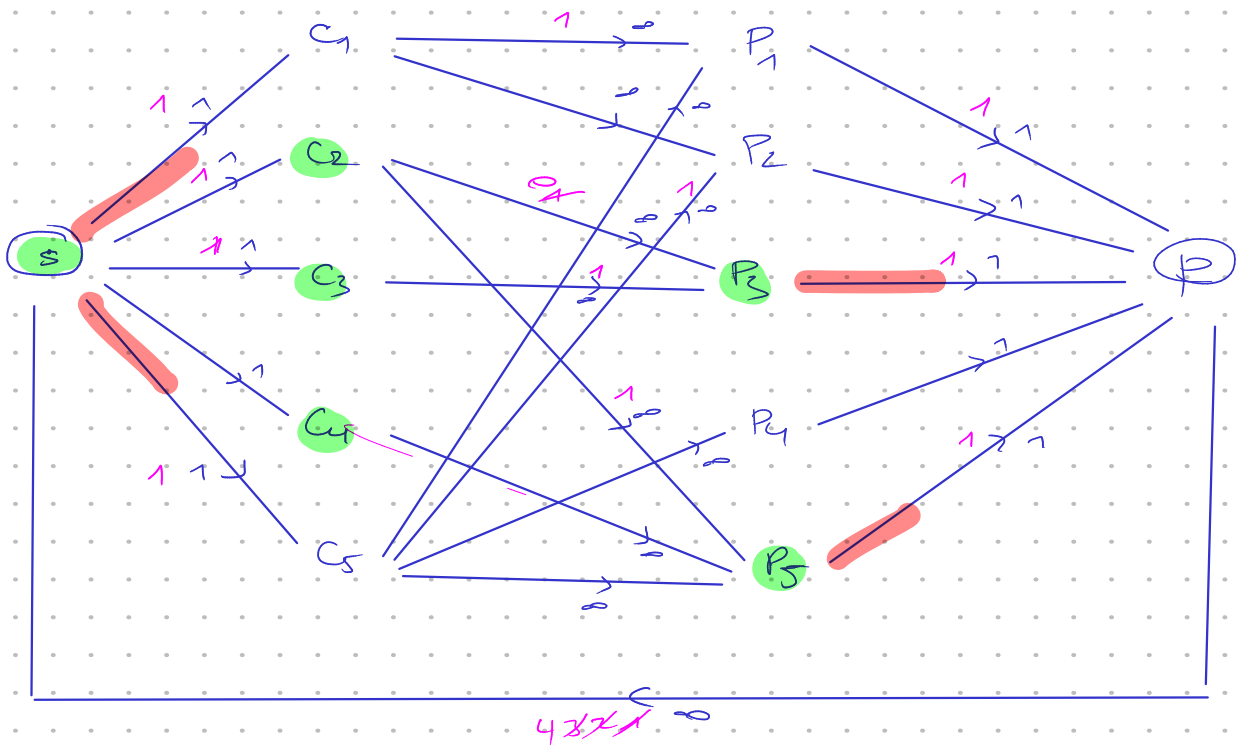
+ ajator 2 sante 1 sorce + 1 pinto
Gardet Potea

+ Capteurs :

- ∞ ent C et P
- 1 ent \textcircled{S} et C
- 1 ent P et \textcircled{P}

(∞)

2)



→ alg de FF à partir de flot nul. $\phi = 0$

$$\underline{E_1} = \{sGr_{1|1}\} \quad f = 1 \quad \phi = 1$$

E₂ : $\{s \in P_{3,p}\} \quad \delta = 1 \quad \phi = 2$

$$\underline{T_3} : \quad] \underbrace{G_3 P_2 P_5 P}_1 \} \quad \delta = 1 \quad \cdot \quad \phi = 3$$
$$\underline{E_4} : \{ s \in C_5 \mid P \} \quad f=1 \quad \phi=4$$

FS : SFD $\Rightarrow \phi_{max} = 4$

Ex 1?

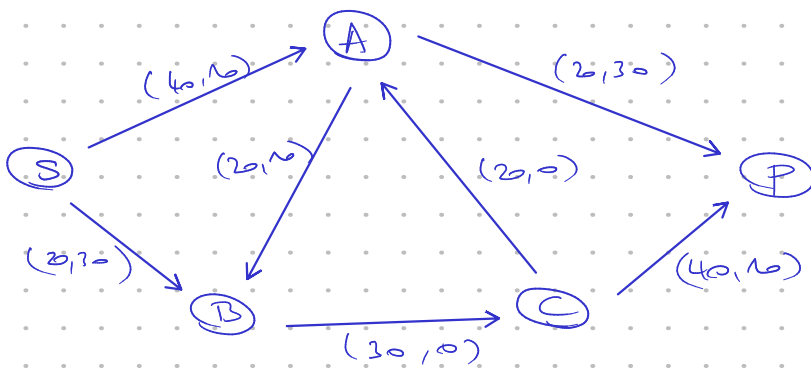
$$V = \{s, c_2, c_3, c_4, p_3, p_5\}$$

$$E = \{(s, c_2), (s, c_3), (c_2, p_3), (c_3, p_5)\}$$

$$c(E) = 4 = \phi_{max} \Rightarrow \boxed{\phi^* = 4}$$

Ex 2?

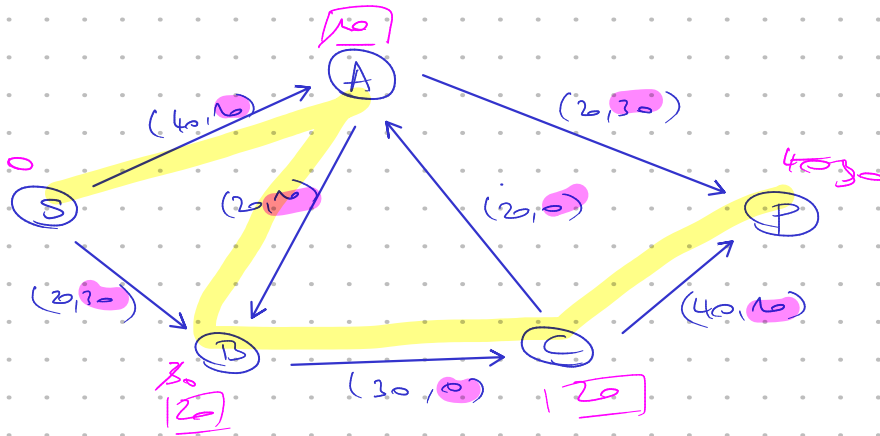
(cG, lclcl)
↑
capacité
← cost



Algorithme = 1) donner une valeur de ϕ au départ
2) après flot



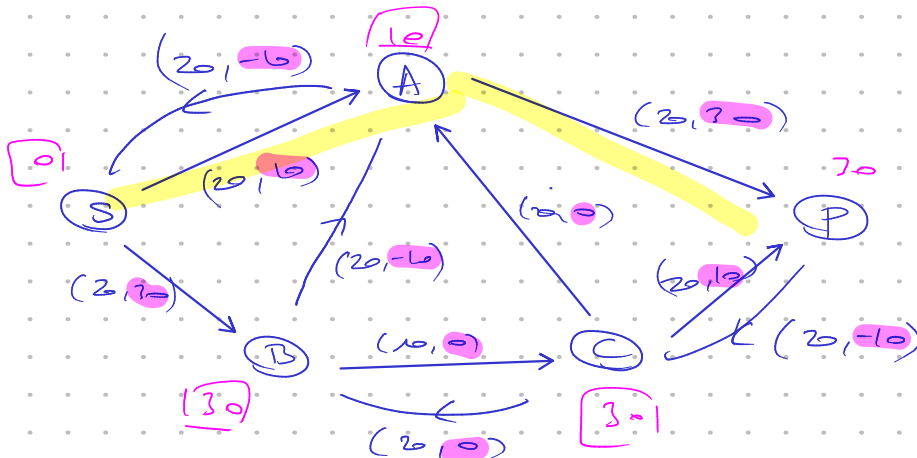
Règle 1) PCC de ϕ à ϕ
2) idem



$$\mu = \{s, A, B, C, p\}$$

$$f = 20$$

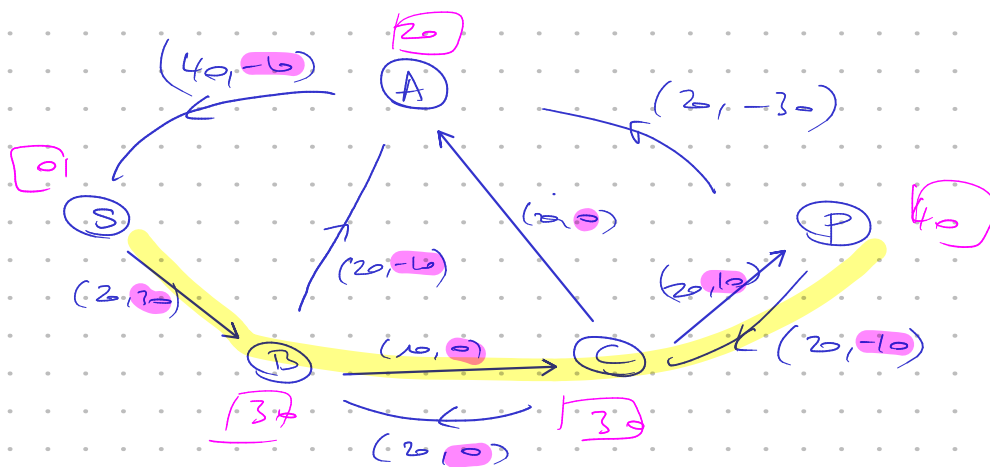
$$\Rightarrow \phi = 20$$



$$\mu = \{s, A, p\}$$

$$f = 20$$

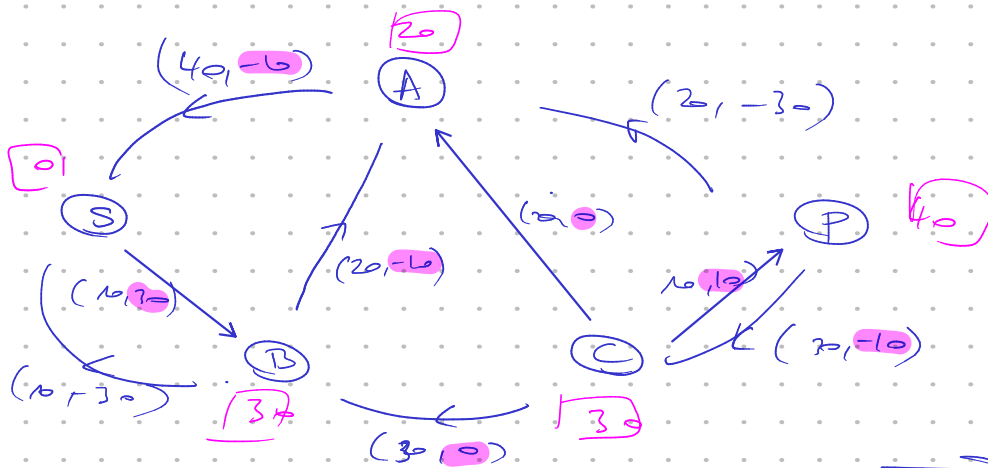
$$\Rightarrow \phi = 40$$



$$\mu = \{S, B, C, P\}$$

$$\delta = 10$$

$$\Rightarrow \phi = 50$$



→ plus de flux
de S à P

$$\Rightarrow \boxed{\begin{array}{l} \phi_{\max} = 50 \\ \text{coût } 1800 \end{array}}$$