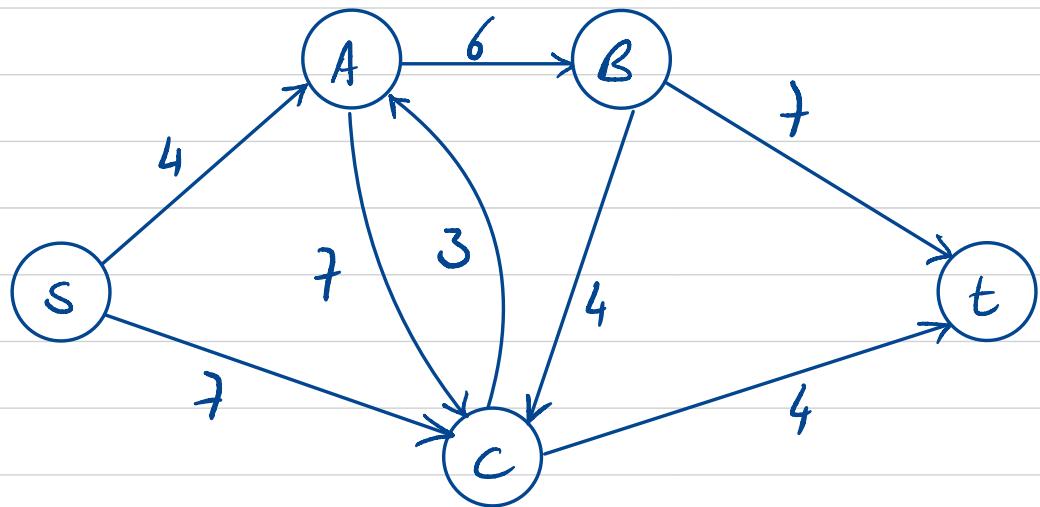


Maria Iz



Q1 (TI 08/09, III. c)

$$L = \langle A, B, C \rangle$$



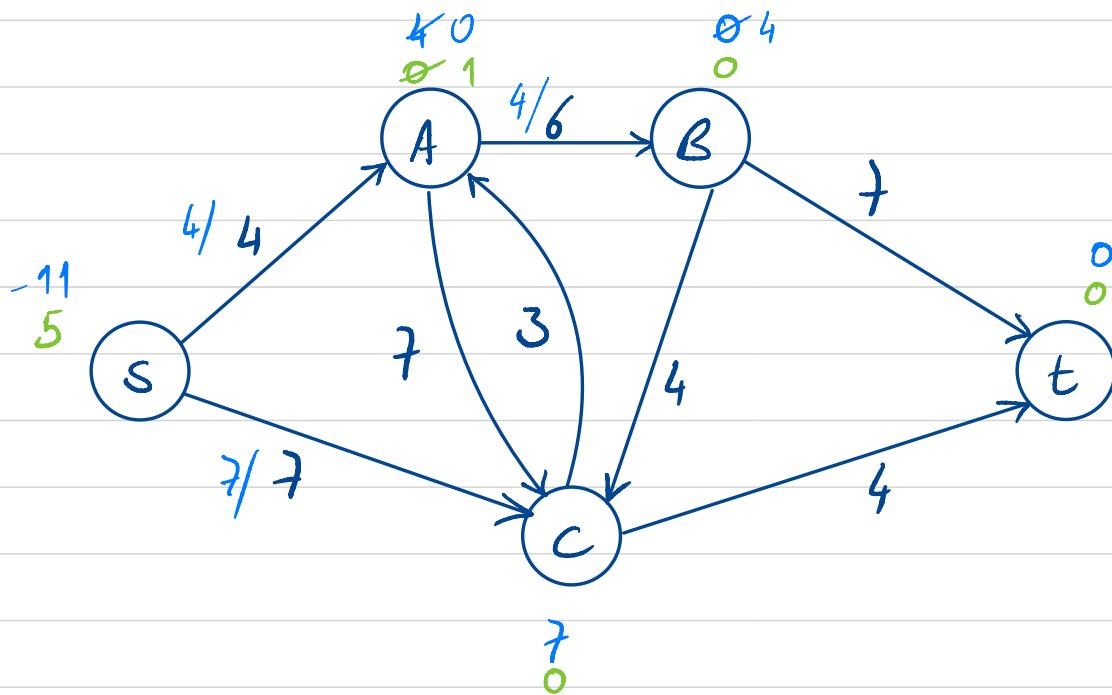
$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

Q1 (T1 08/09, III. c)

$$L = \langle A, B, C \rangle$$

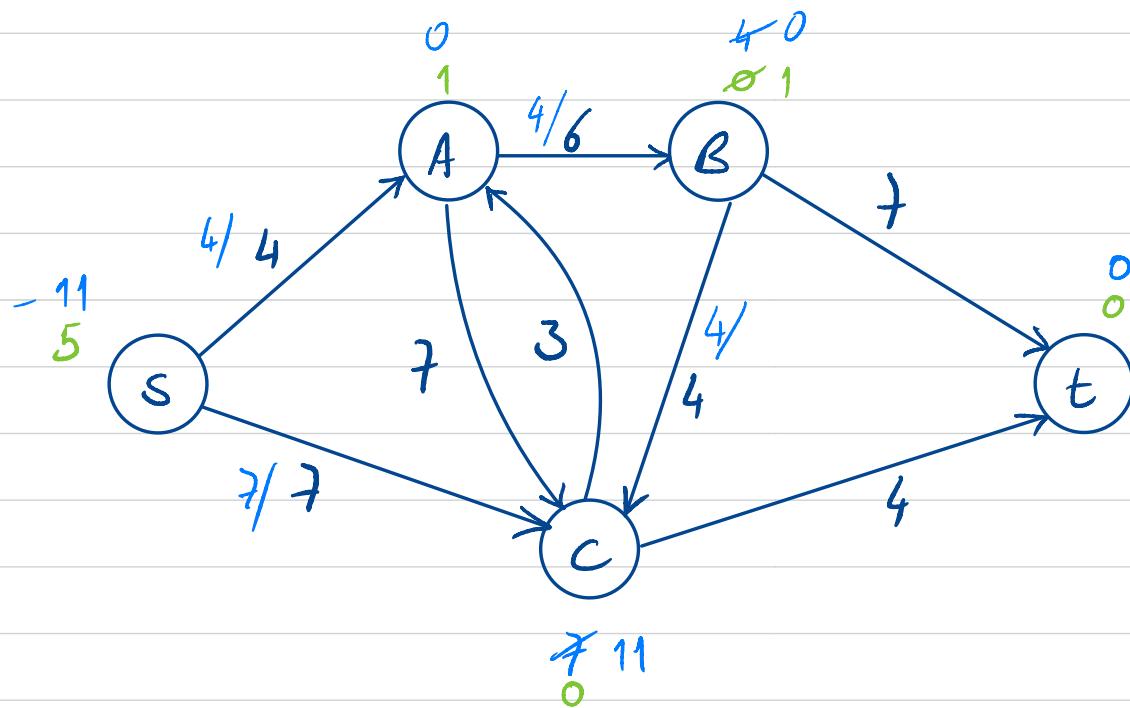


$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

A1 (T1 08/09, III. c)



$$L = \langle A, B, C \rangle$$

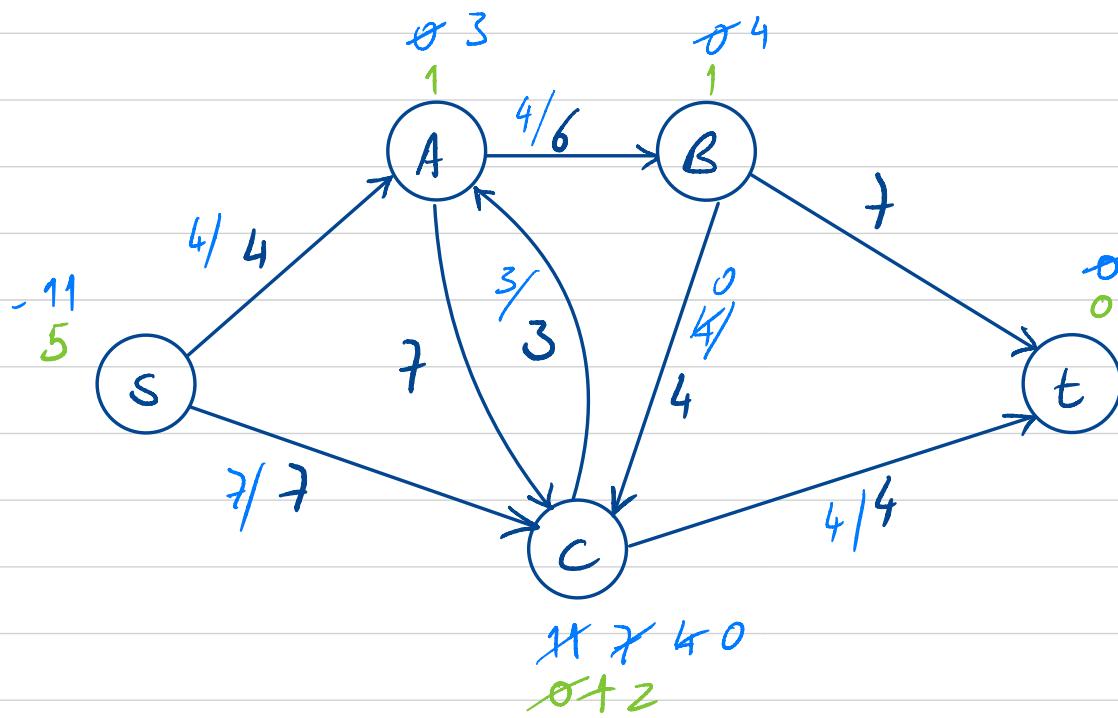
$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle B, A, C \rangle$$

AI (TI 08/09, III. z)



$$L = \langle B, A, C \rangle$$

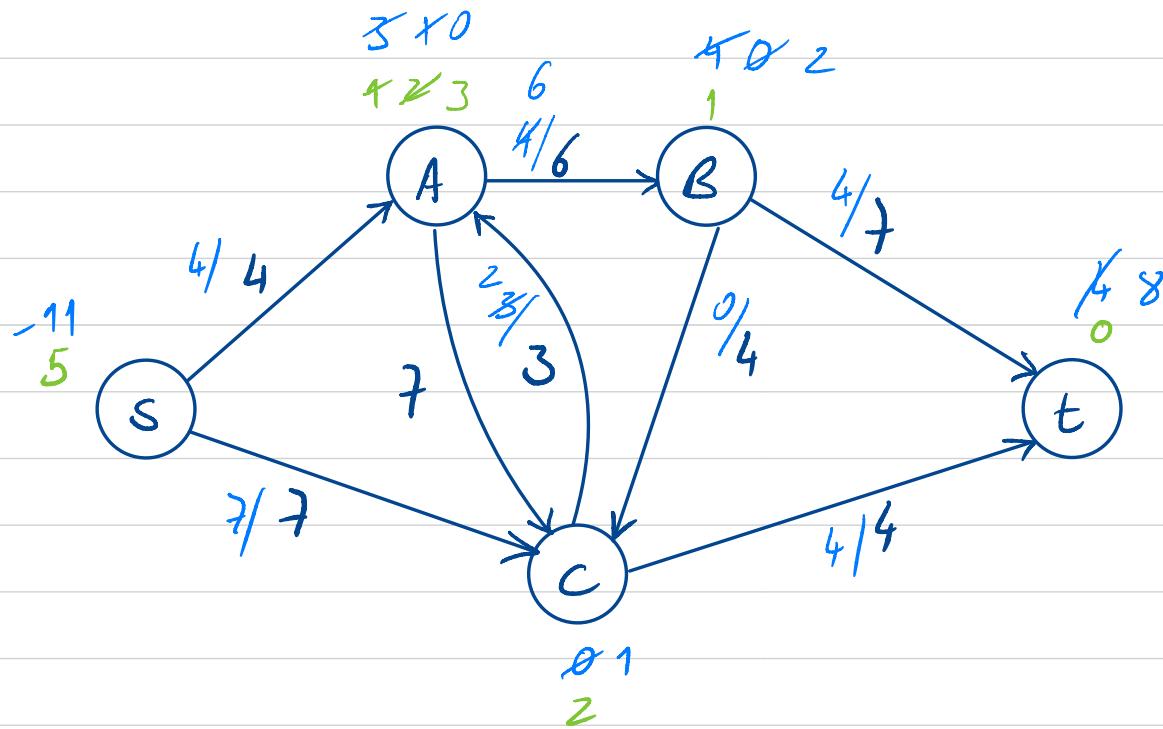
$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle C, B, A \rangle$$

A1 (TI 08/09, III. z)



$$L = \langle C, B, A \rangle$$

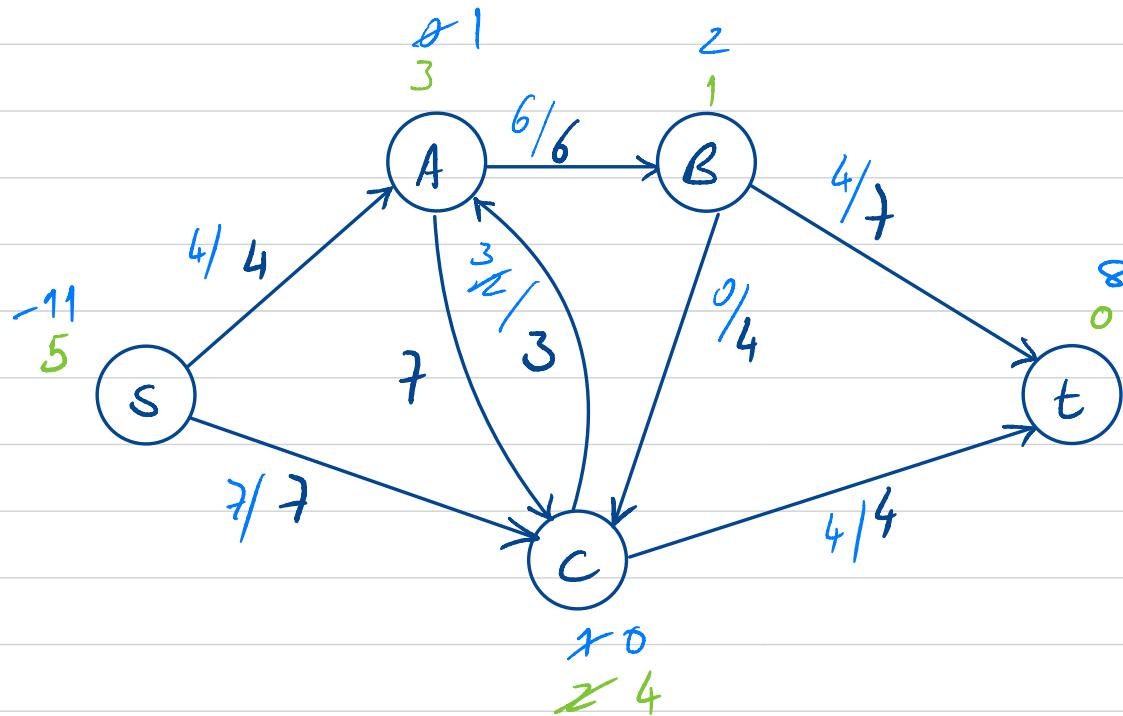
$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle A, C, B \rangle$$

a1 (T1 08/09, III. c)



$$L = \langle A, C, B \rangle$$

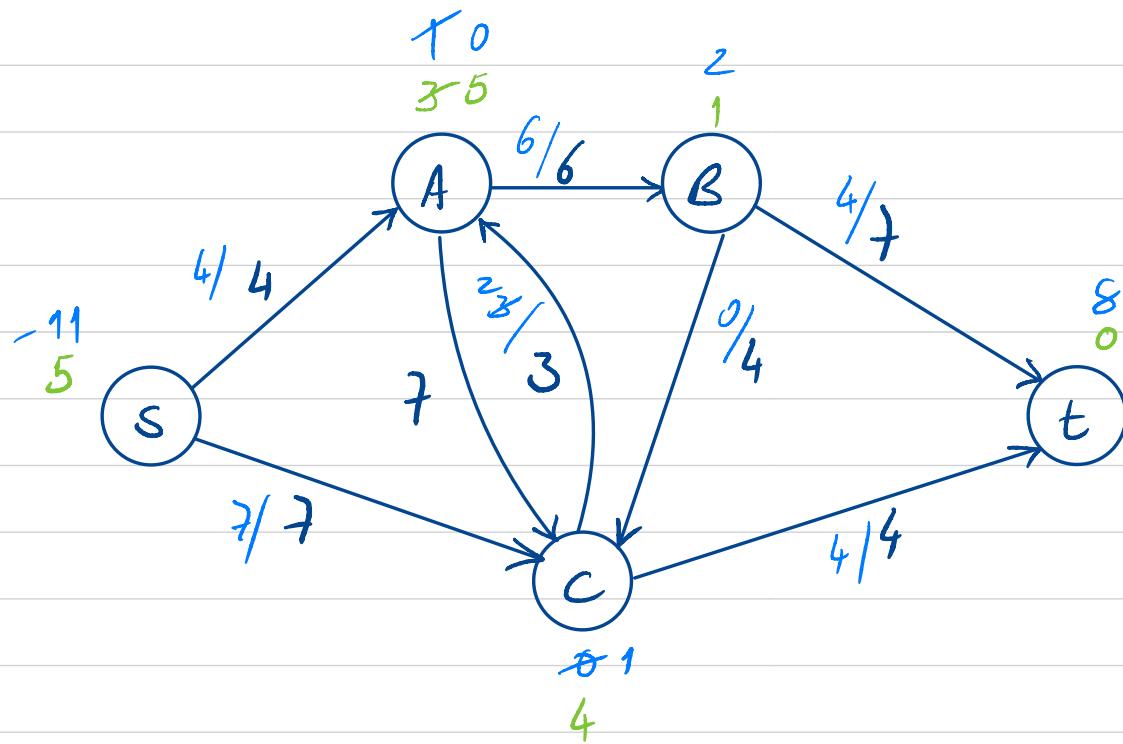
$$N[A] = \langle s, B, C \rangle$$

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$$L = \langle C, A, B \rangle$$

Q1 (T1 08/09, III. c)



$$L = \langle C, A, B \rangle$$

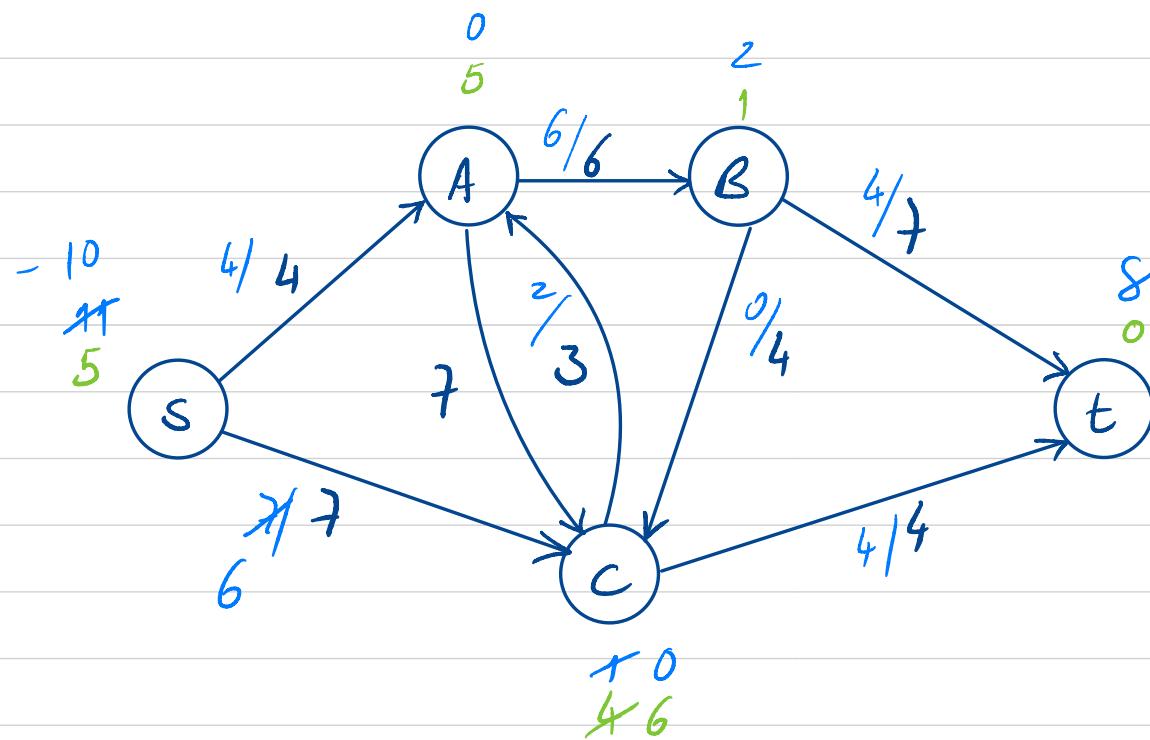
$$N[A] = \langle s, B, C \rangle$$

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$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle A, C, B \rangle$$

Q1 (TI 08/09, III. z)



$$L = \langle A, C, B \rangle$$

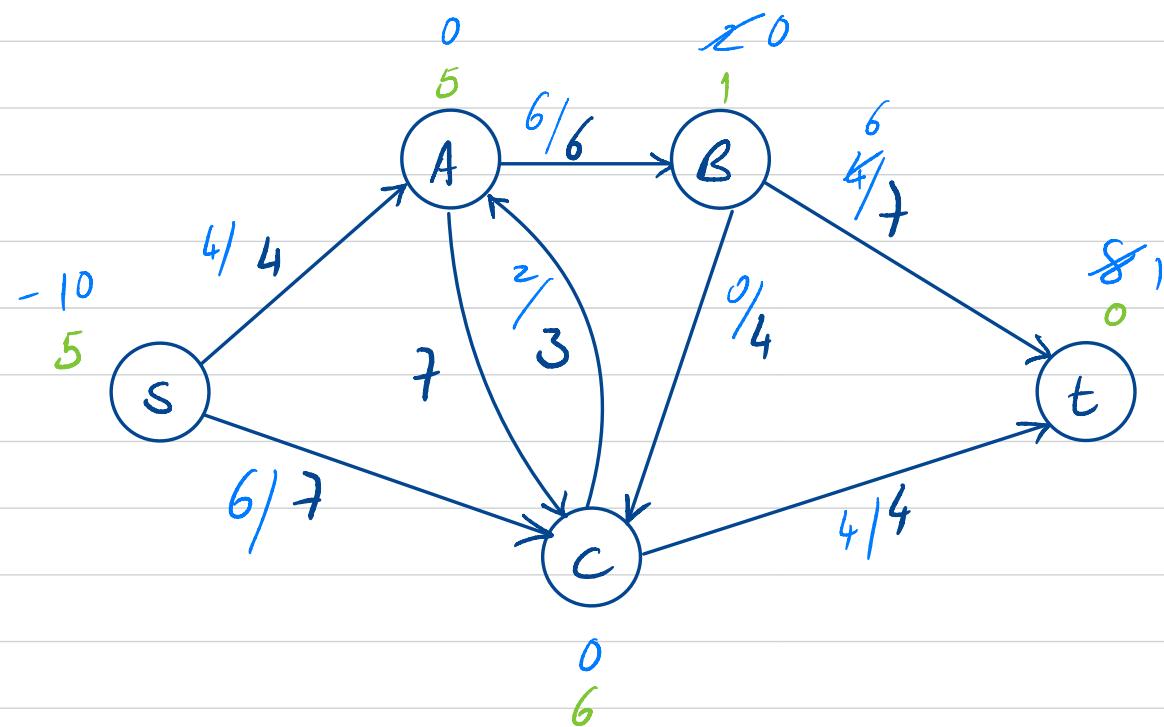
$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle C, A, B \rangle$$

A1 (TI 08/09, III. z)



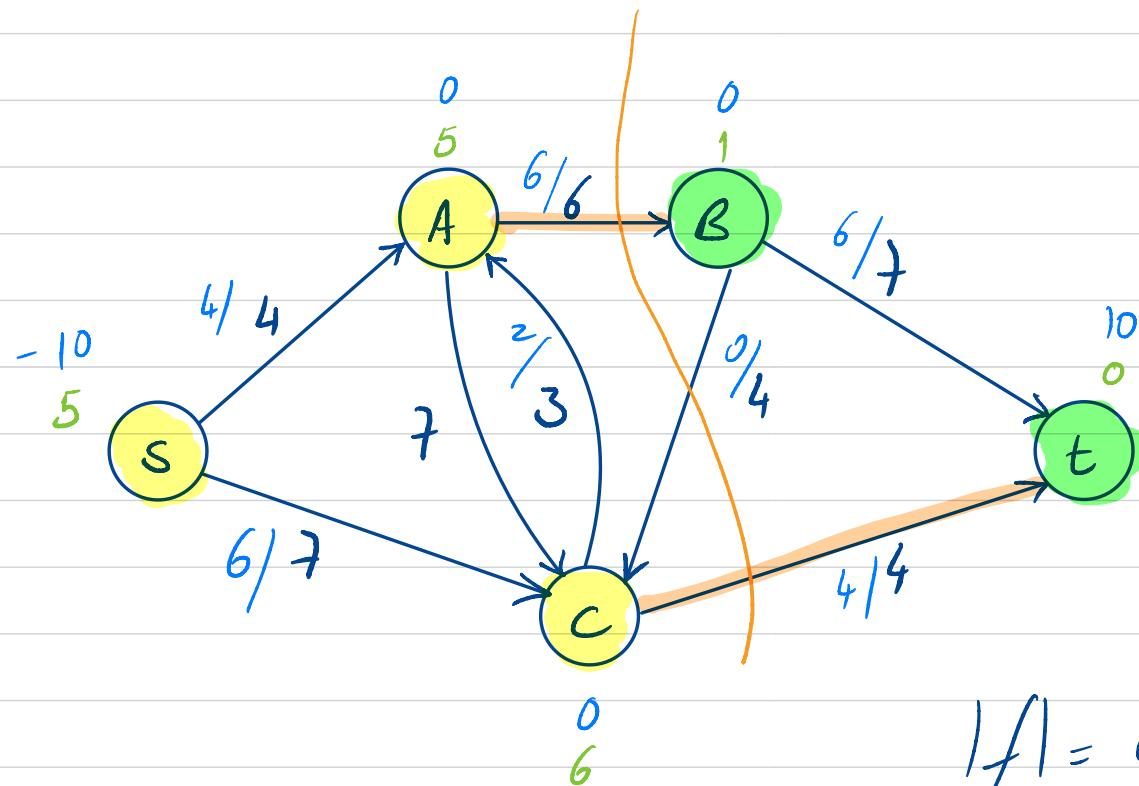
$$L = \langle c, A, B \rangle$$

$$N[A] = \langle s, B, c \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

A1 (TI 08/09, III. z)



$$L = \langle c, A, B \rangle$$

$$N[A] = \langle s, B, c \rangle$$

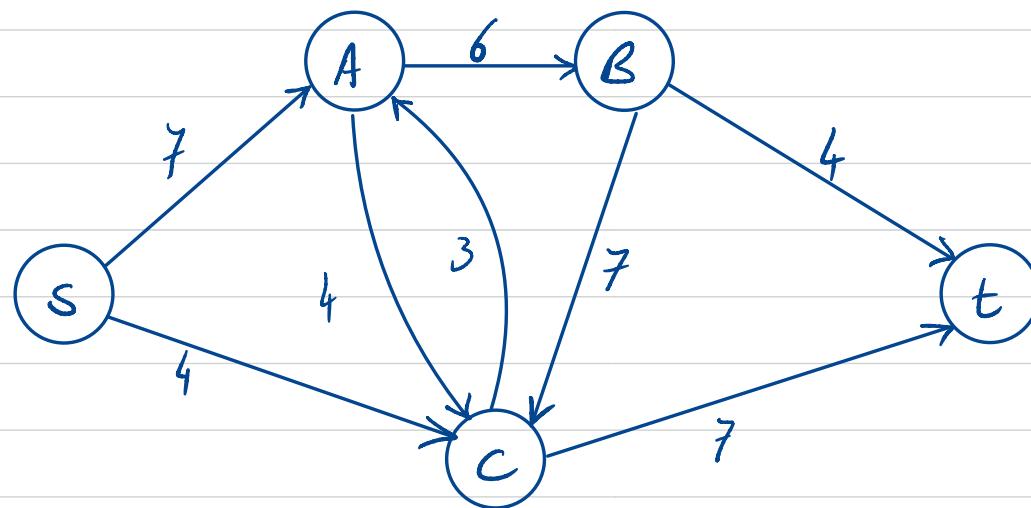
$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$|f| = 6 + 4 = 10$$

Q2 (RI 08/09 III.3)

$$L = \langle A, B, C \rangle$$



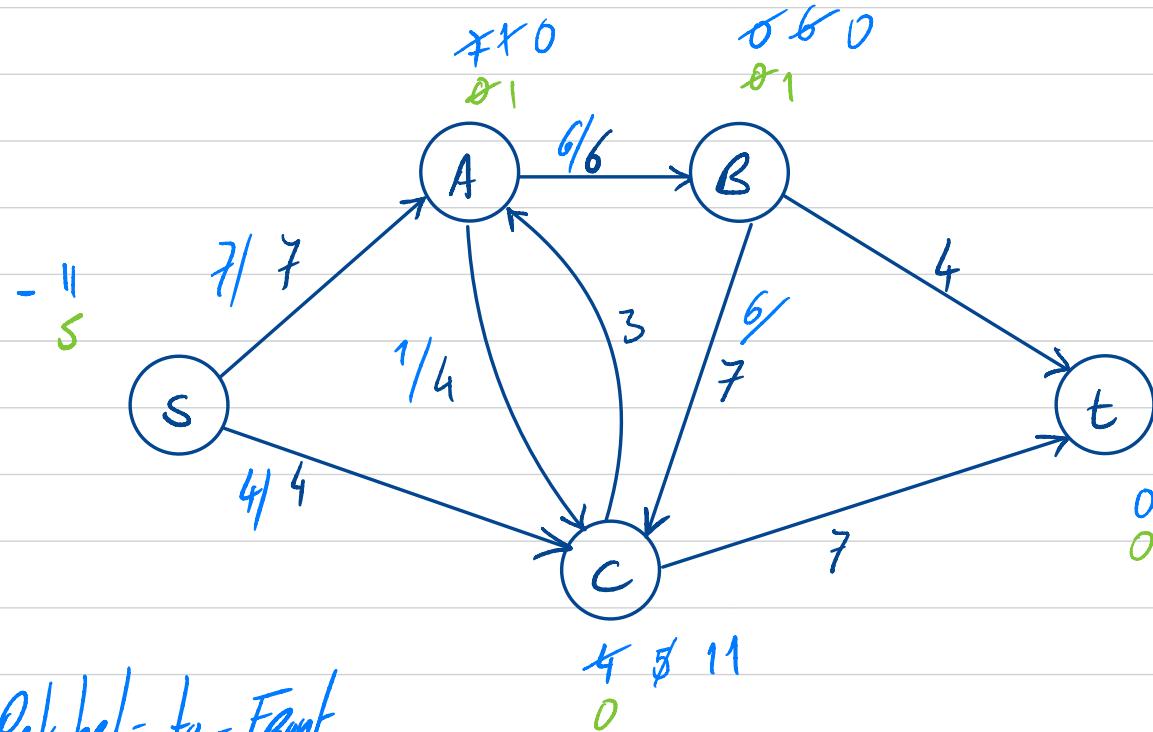
$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

Rekurrenz - to - Front

Q2 (R1 Oc/O9 III.3)



Rekbel-to-Front

$$L = \langle A, B, C \rangle$$

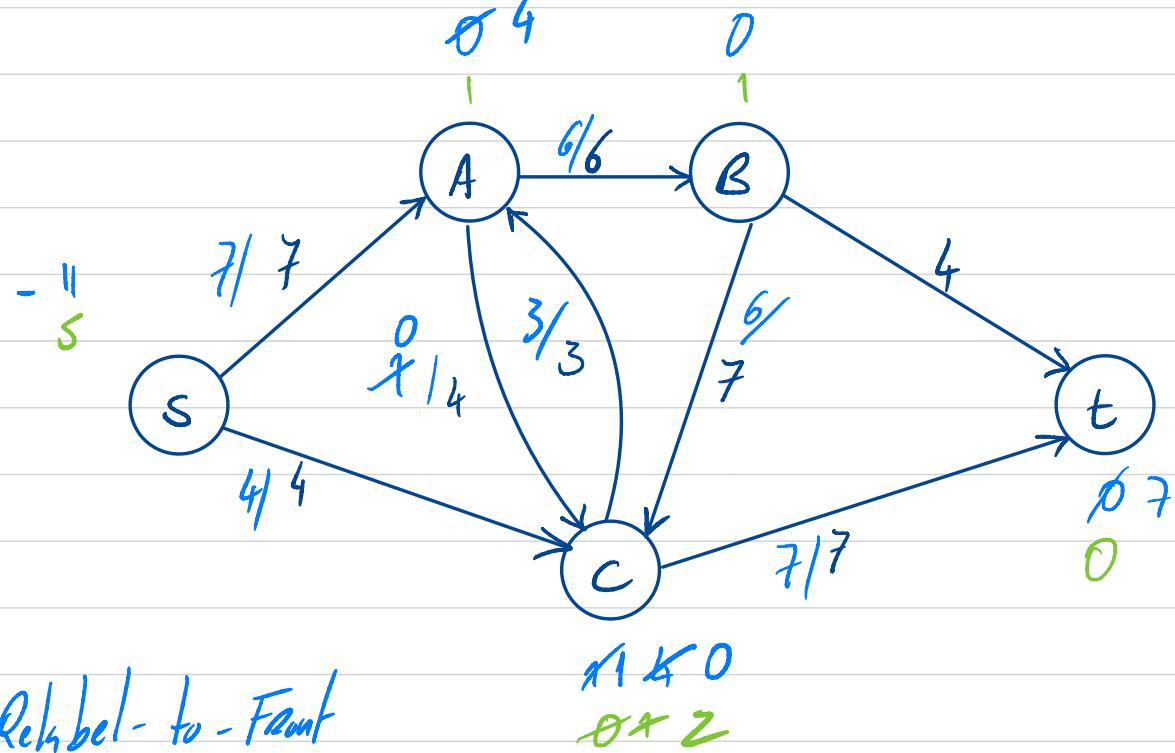
$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle B, A, C \rangle$$

Q2 (R1 08/09 III.3)



$$L = \langle B, A, C \rangle$$

$$N[A] = \langle s, B, C \rangle$$

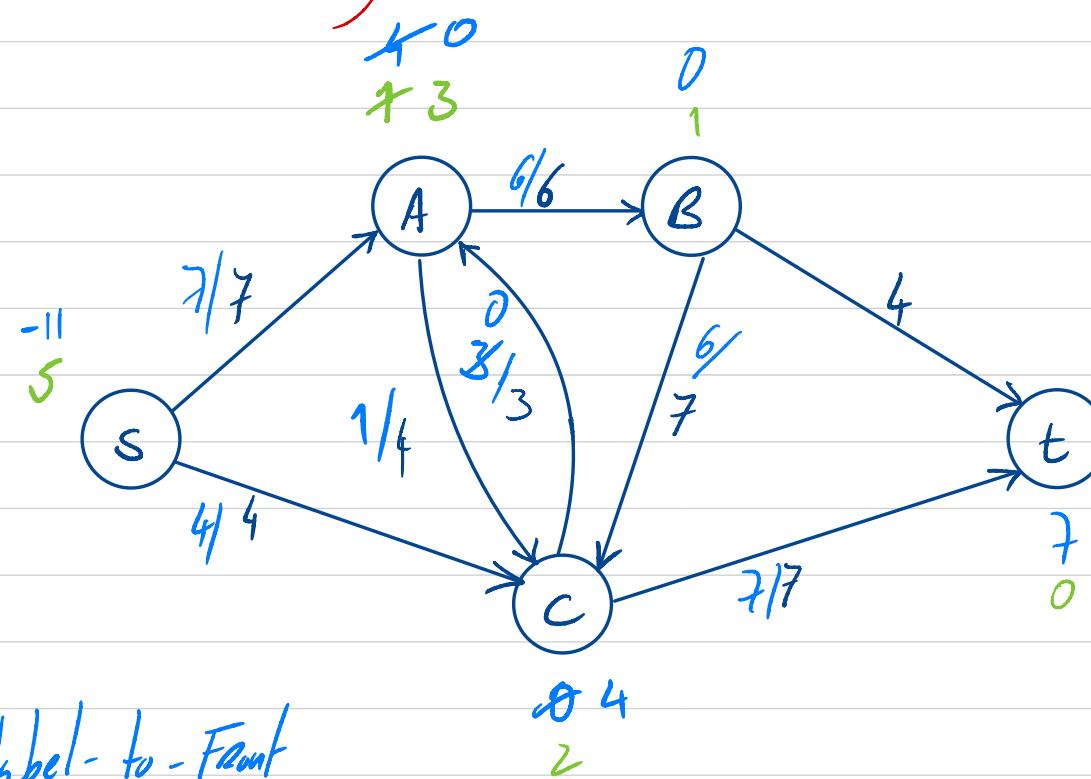
$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle C, B, A \rangle$$

Rekbel-to-Front

Q2 (R1 08/09 III.3)



$$L = \langle C, B, A \rangle$$

$$N[A] = \langle s, B, C \rangle$$

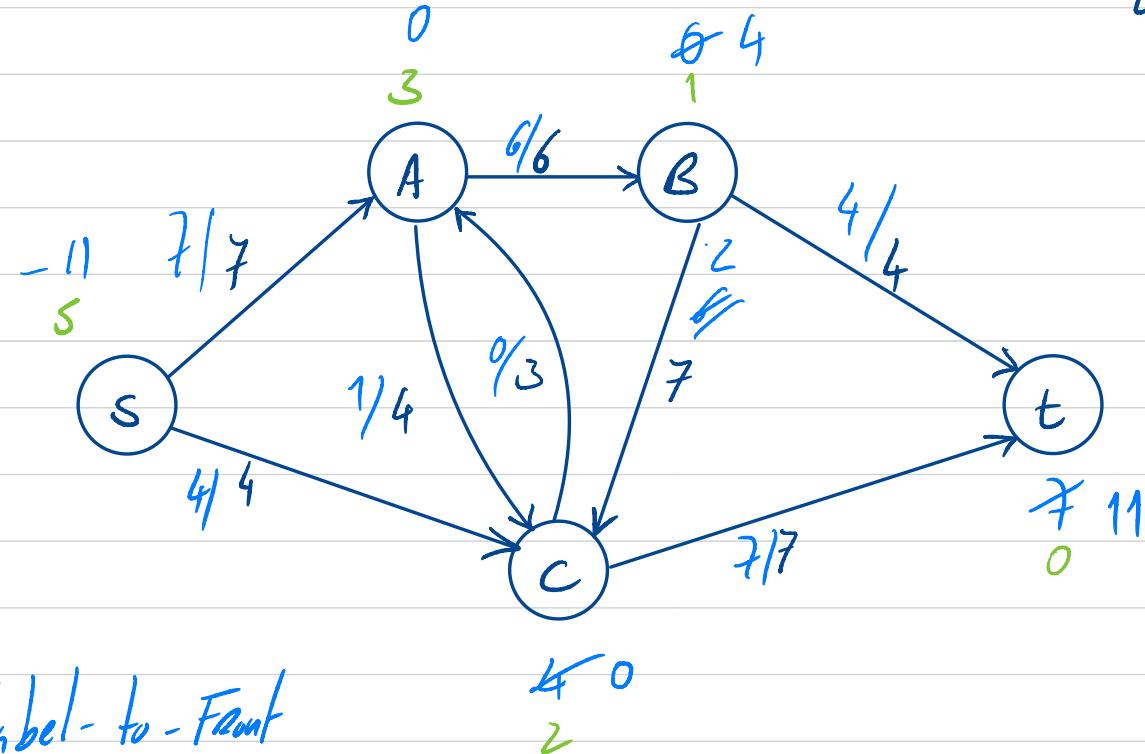
$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$L = \langle A, C, B \rangle$$

Rekbel-to-Front

Q2 (R1 08/09 III.3)



Rekbel-to-Front

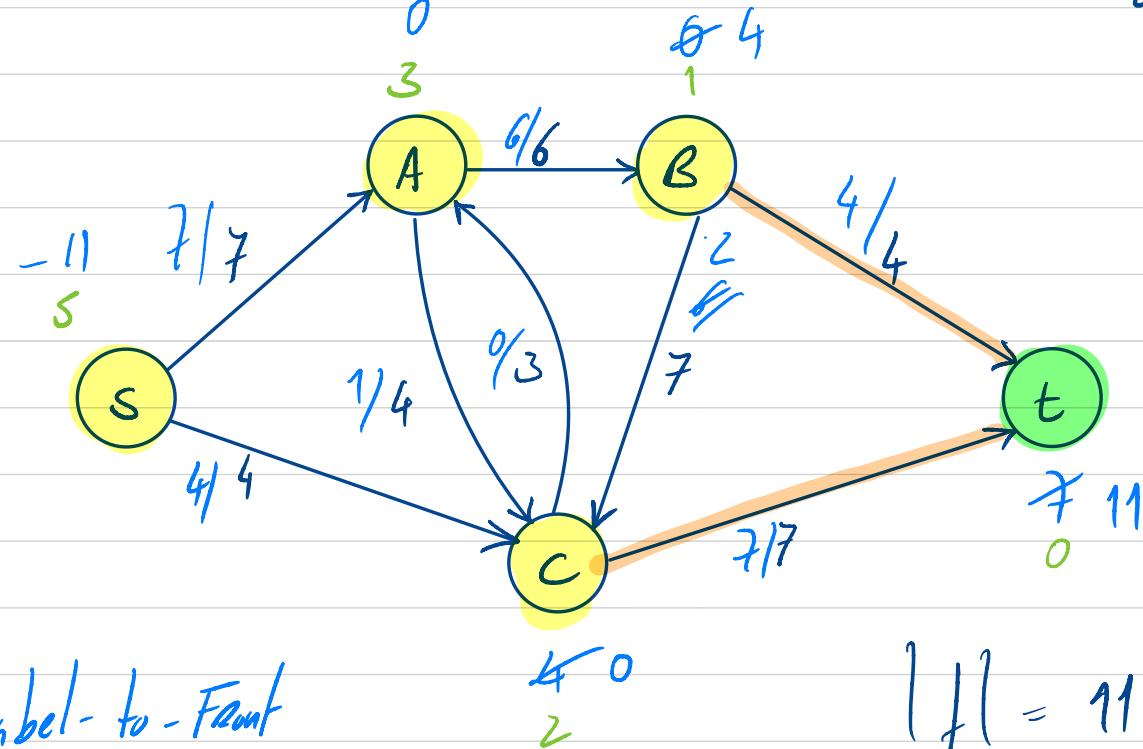
$$L = \langle A, C, B \rangle$$

$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

Q2 (R1 08/09 III.3)



Rekbel - to - Front

$$L = \langle A, C, B, S \rangle$$

$$N[A] = \langle s, B, C \rangle$$

$$N[B] = \langle A, C, t \rangle$$

$$N[C] = \langle s, A, B, t \rangle$$

$$\underline{|f|} = 11$$

Q5 (CLRS - CLRS 26.4-4)

- $G = (V, E)$
- f fluxo máximo em G
- h função de alturas consistente com f .

- Escolher \hat{h} tal que:
 - $0 < \hat{h} < |V|$ (C_1)
 - $\forall v \in V \setminus \{s, t\}$. $h(v) \neq \hat{h}$ (C_2)

- $S = \{v \mid h(v) > \hat{h}\}$, $T = V \setminus S$

- Observação: Existe sempre \hat{h} nas condições (C_1) e (C_2) .

- N° de valores possíveis para \hat{h} : $|V| - 1$
- N° de vértices: $|V| - 2$
- Há pelo menos um valor possível para \hat{h} sem vértice correspondente

Q5 (CLRS - CLRS 26.4-4)

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- h função de alturas consistente com f .
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 - $0 < \hat{h} < |V|$ (C_1)
 - $\forall v \in V \setminus \{s, t\}$. $h(v) \neq \hat{h}$ (C_2)

$$S = \{v \mid h(v) > \hat{h}\}, T = V \setminus S$$

- Observação: (S, T) corresponde a um corte na rede residual.

- Suponhamos q (S, T) não é corte na rede G_f .

segue q existem dois vértices $u \in S$

tais q $u \in S$, $v \in T$ e $(u, v) \in E_f$

- Contudo, pelo modo como escolhemos \hat{h} , sabemos q:

$$h(u) > \hat{h} > h(v)$$

$$h(u) > h(v) + 1 \wedge (u, v) \in E_f$$

Contradiz o invariantes
de alturas