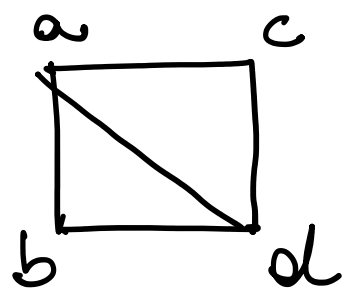
ESEMPIO ARCOCONNETTIVITA'

lunedì 29 marzo 2021 13:08

$G(V,E)$:

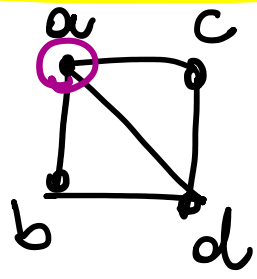


$K^E(G) = ?$

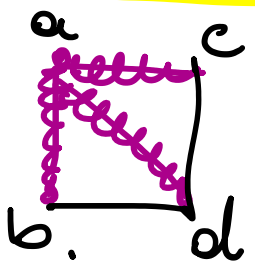
$$K^E(G) = \min\{K^E_{ad}(G), K^E_{ac}(G), K^E_{dc}(G), K^E_{bc}(G), K^E_{bd}(G), K^E_{ab}(G)\}$$

NB $\forall x,y \in V, x \neq y$ è $K^E_{xy}(G) > 1$

$S = \{a, y\}$



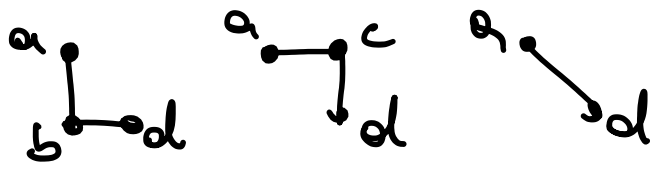
$\delta(S)$



$|\delta(S)| = 3$

$\delta(S)$ separa a da d

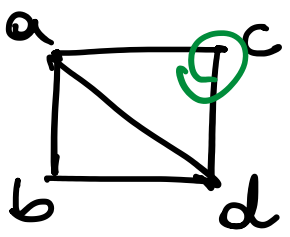
$\Rightarrow K^E_{ad}(G) \leq 3$. Siccome ci sono 3 cammini disgiunti sugli archi da a a d:



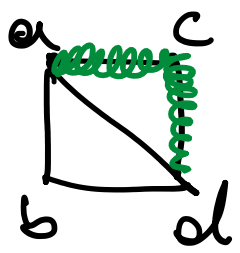
altre

$K^E_{ad}(G) = 3$

$S = \{c, y\}$



$\delta(S)$



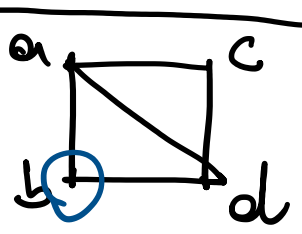
$|\delta(S)| = 2$

$\delta(S)$ separa a da c $\Rightarrow K^E_{ac}(G) \leq 2 \xRightarrow{NB} K^E_{ac}(G) = 2$

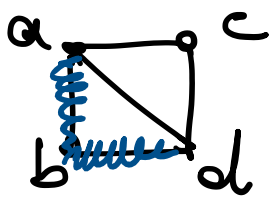
// // d da c $\Rightarrow K^E_{dc}(G) \leq 2 \xRightarrow{NB} K^E_{dc}(G) = 2$

// // b da c $\Rightarrow K^E_{bc}(G) \leq 2 \xRightarrow{NB} K^E_{bc}(G) = 2$

$S = \{b, y\}$



$\delta(S)$



$|\delta(S)| = 2$

$\delta(S)$ separa b da d $\Rightarrow K^E_{bd}(G) \leq 2 \xRightarrow{NB} K^E_{bd}(G) = 2$

// // a da b $\Rightarrow K^E_{ab}(G) \leq 2 \xRightarrow{NB} K^E_{ab}(G) = 2$

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concludendo: $K^E(G) = \min\{2, 3\} = 2$