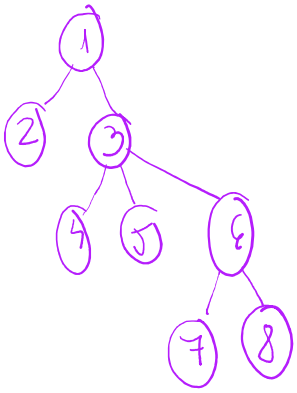
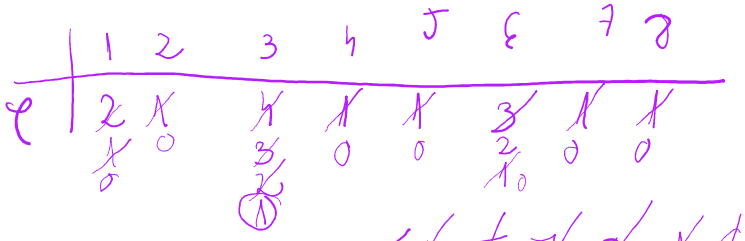
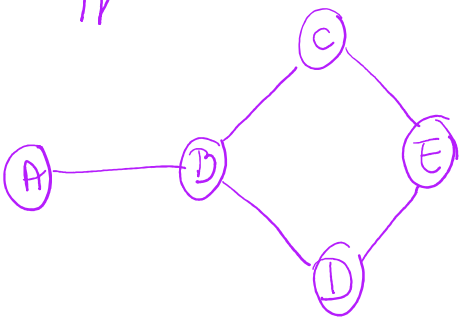
Kurzus 10

15 May 2023 10:00





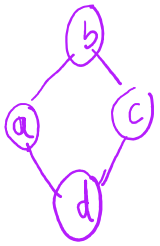
Fokszámmal együtthaló



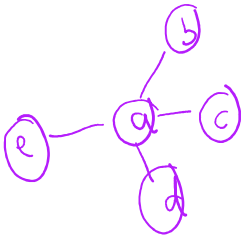
$C_D(A) = 1 \quad C'_D(A) = \frac{1}{4} = 0.25$

Freeman féle együtthaló:

$$C_D = \frac{(3-1)+(3-2)+(3-2)+(3-2)}{4 \cdot 3} = \frac{5}{12}$$

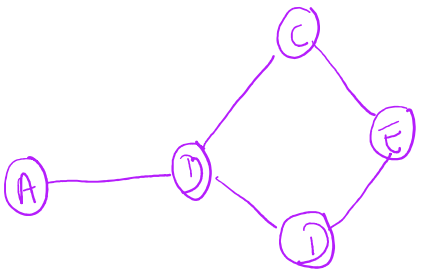


$C_D = 0$



$C_D = 1$

Közvetítői (betweenness) együtthaló:



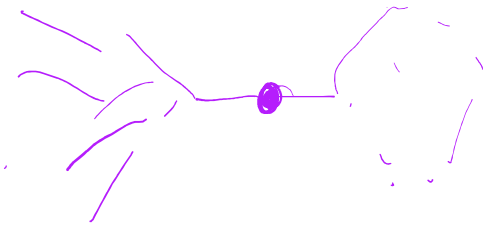
$C_D(A) = 0$

$$C_D(B) = \underset{AC}{\frac{1}{1}} + \underset{AD}{\frac{1}{1}} + \underset{AE}{\frac{2}{2}} + \underset{CD}{\frac{1}{2}} = 3.5$$

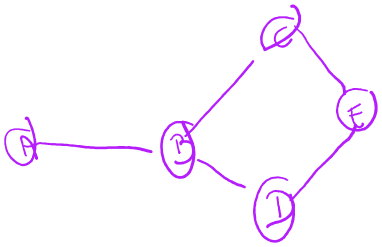
$$C'_D(B) = \frac{3.5}{\frac{4 \cdot 3}{2}} = \frac{\frac{7}{2}}{\frac{12}{2}} = \frac{7}{12}$$

$$C_D(C) = \underset{AE}{\frac{1}{2}} + \underset{BE}{\frac{1}{2}} = 1$$

$$C_D(E) = \underset{CD}{\frac{1}{2}}$$



Közelség együttható: (closeness)

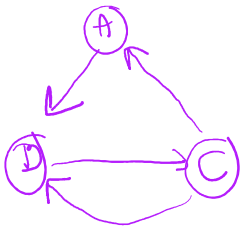


$$C_c(A) = \frac{1}{1+2+2+3} = \frac{1}{8}$$

$$C_c(B) = \frac{1}{1+1+1+2} = \frac{1}{5}$$

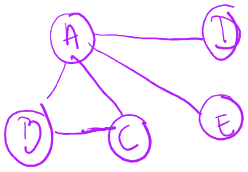
$$C_c'(A) = \frac{5}{8}$$

Page Rank $\quad d = 0{,}85 \quad N = 3$



$$\begin{cases} PR(A) = \frac{1-d}{N} + d \cdot \frac{PR(C)}{2} \\ PR(C) = \frac{1-d}{N} + d \cdot \frac{PR(D)}{1} \\ PR(B) = \frac{1-d}{N} + d \cdot \left(\frac{PR(A)}{1} + \frac{PR(C)}{2} \right) \end{cases}$$

Klaszterezési együttható:



$$CC(A) = \frac{2 \cdot 1}{4 \cdot 3} = \frac{1}{6}$$

$$CC = \frac{3 \cdot \Delta}{\text{összes lehetséges háromszög}}$$

ADC

A: DAC, DAE, DAD, CAE, CAD, EAD

B: ~~ADC~~

C: ~~DCA~~, ~~CAE~~, ~~CAD~~

$$CC = \frac{3 \cdot 1}{6} = \frac{1}{2}$$