Example-II

Tuesday, July 12, 2022 4:12 PM

Example II:

 $\begin{bmatrix}
Z = q \text{ wery } (0)
\end{bmatrix}^{\circ}$ $\hat{J} = k + 1 \quad 1$ while j > 0 2 2 j € j - 1 3 z = quen(z * X[j]) 4 { if k ≤ 2 1 then ? (y < query (z)] by dse { y < D ; } while i > 0 do d i ← i − 1 ; 10 y + query (y); }

consider both voxtices weight & edge weight. v.

restricted walk: 70 >

elge seq : $(e_4, \dots e_n)$ s.t. $(e_i) \leq w_{e_i}$ (70) With Vortices seep (Va,... Vn+4). Cnot (Vi) ≤ Wvi (70).

 $flen(k,c): T \rightarrow N$

=> 4 len (k, c) (7) = # {1 | Vi ∈ QV (c) A Vi ∈ k(7) A K ∈ WALK (c) }

 $A(c) = \tau \rightarrow \max\{ \text{ flon}(k,c)(\tau) \mid k \in \mathcal{W} k(c) \}.$

better ?

in provious definition.

 $y^{\delta} \underset{\omega: \ \zeta \to \{0 \ (\mathcal{T}_{k}) \le 2\}}{\underbrace{\sqrt{1 \left(t_{k}\right) \le 2}}} y^{11} \underset{\omega: \ \zeta \to (\mathcal{T}_{k})}{\underbrace{\sqrt{1 \left(t_{k}\right) \le 2}}} y^{11} \underbrace{\sqrt{1 \left(t_{k}\right) \le 2}} y^{11} \underbrace{\sqrt{1 \left(t_{k}\right) \ge 2}} y^{11} \underbrace{\sqrt{1 \left($

 $A(c) = C \rightarrow \begin{cases} (Ck)^2 + 2 + (Ck) & k \leq 2 \\ (Ck)^2 + 1 & k > 2 \end{cases}$

Example Limitation:

still the example of limitation:

Simplified: Multi Raunds Single (K): [j < K]

(z < queny(0)]

 $\omega:1$

 $\begin{cases} \{y \in q \text{ com}(y * z)\}; \\ \text{if } ([j \neq z]^4, [y \in o]^5, [skip]^6); \end{cases}$ $[j \in j-1]^7$

Z = 0 Z =

under New Definition.

Definition. $0 \quad (7k) = 0$ $w: \tau \rightarrow \xi \quad (7k) = 1$ $2 \quad (2k) \Rightarrow 2$ $w: \tau \rightarrow \tau \quad (7k) = 0$ $0: \tau \rightarrow \begin{cases} (\tau k - 1) \\ (7k) = 0 \end{cases}$ $w: \tau \rightarrow \tau \quad (7k) = 0$ $\Rightarrow \quad A(c) = \tau \rightarrow \begin{cases} 1 \quad (7k) = 0 \\ 2 \quad (7k) = 1 \end{cases}$ $\Rightarrow \quad (7k) \Rightarrow 2$