

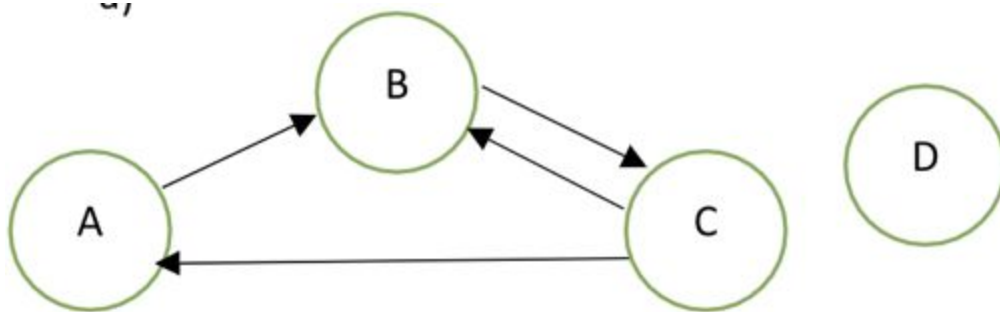
**Q1** (1 point)

- Similarities: (1/2 point) \*they get the whole point if they mention at least two\*
    - Both methods for link analysis
    - Both calculate scores based on hyperlinks only, instead of content
    - Both affected by link farm
  - Differences: (1/2 point)
    - Pagerank is a global measure independent of query, HITS is applied after matching with query
    - Pagerank has one score for each query, HITS has hubs and authorities scores which are calculated separately
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**Q2** (4 points)

**a)** (0.5 point)

\*if they don't include D, they will get 0.25\*



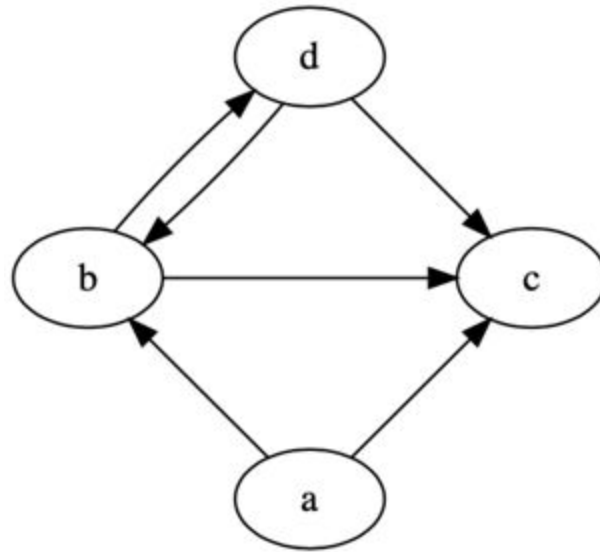
**b)** (1.5 points)

	A	B	C	D
A	0.025	0.925	0.025	0.025
B	0.025	0.025	0.925	0.025
C	0.475	0.475	0.025	0.025
D	0.25	0.25	0.25	0.25

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**Q3** (2 points)

**a)** (0.5 point)



**b)** (0.5 point)

	Hub	Auth
A	1	1
B	1	1
C	1	1
D	1	1

**c)** (1 point)

**First iteration** (0.5 point)

	Hub	Auth
<b>A</b>	2	0
<b>B</b>	2	2
<b>C</b>	0	3
<b>D</b>	2	1

**Second iteration** (0.5 point)

	Hub	Auth
<b>A</b>	5	0
<b>B</b>	4	4
<b>C</b>	0	6
<b>D</b>	5	2