



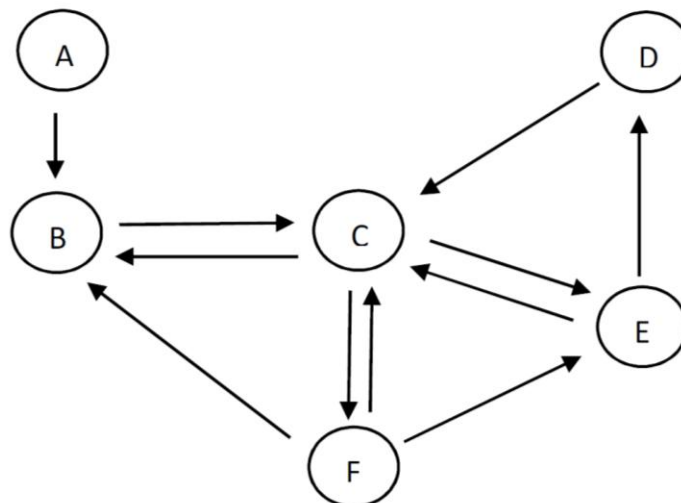
## Exercise: Link Analysis

**Please note:** The exercises will be neither collected, nor corrected, or graded.

Even though the homework assignments are optional, you are encouraged to answer them and to discuss them in small groups, as they will help you prepare for your final exam.

### EXERCISE 12.1

Why is the prestige recursive in its nature? And how is that reflected in Seeley's model?



### EXERCISE 12.2

Given the above web graph.

- i. How would PageRank rank the nodes?
- ii. What's the underlying idea that yields such a ranking?

**EXERCISE 12.3**

Briefly explain the random surfer model? Why is it applicable and mathematically feasible to apply on a big scale?

**EXERCISE 12.4**

Topic-sensitive page rank mitigates a drawback of PageRank. What's the drawback and how is it addressed?