*Social* Networks

Home Work #1

B. Mishra

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Q1. [10 ] Exercise #1 ([EK], pp 349)

1. Consider the set of 18 Web pages drawn in Figure 13.8, with links forming a directed graph. Which nodes constitute the largest strongly connected component (SCC) in this graph? Taking this as the giant SCC, which nodes then belong to the sets IN and OUT defined in Section 13.4? Which nodes belong to the tendrils of the graph?

Q2. [10 ] Exercise #5 ([EK], pp 382)

5. Figure 14.21 depicts the links among 6 Web pages, and also a proposed PageRank value for each one, expressed as a decimal next to the node. Are these correct equilibrium values for the Basic PageRank Update Rule? Give a brief (1-3 sentence) explanation for your answer.