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Final Exam

Question 9.2

9.2) If a stack is used instead of a queue for the topological sort algorithm in Section 9.2, does a different ordering result? Why might one data structure give a “better” answer?

The topological order when using a queue is:

s, G, D, H, A, B, E, I, F, C, t.

The topological order when using a stack is:

s, G, H, D, A, E, I, F, B, C, t.

When using a topological sort that uses queues, it processes each point in the same manner as a breadth-first search.