36.2-6 A hamiltonian path in a graph is a simple path that visits every vertex exactly once. Show that the language HAM-PATH = \{ \langle G, u, v \rangle: \text{there is a hamiltonian path from } u \text{ to } v \text{ in a graph } G \} \} \} \} \} \} \} \} \} \} belongs to NP.

36.2-7 Show that the hamiltonian-path problem can be solved in polynomial time on directed acyclic graphs. Given an efficient algorithm for the problem.

33.7-1 Consider an RSA key set with \( p = 11, \ q = 29, \ n = 319, \) and \( e = 3. \) What value of \( d \) should be used in the secret key? What is the encryption of the message \( M = 100? \)