1. Professor Dey claims that the height of an $n$-node Fibonacci heap is $O(\log n)$. Show that his claim is wrong by exhibiting, for any positive integer $n$, a sequence of Fibonacci-heap operations that creates a Fibonacci heap consisting of just one tree that is linear chain of $n$ nodes.

2. Page 495, 23-1 (b) (1st edition), Page 558, 22-1 (b) (2nd edition), Page 621, 22-1 (b) (3rd edition)

3. An articulation point of a connected (undirected) graph $G$ is a vertex whose removal disconnects $G$. Give an algorithm for reporting all articulation points of a connected graph $G$ in $O(|V| + |E|)$ time. Argue for correctness of your algorithm.