In a typed essay of 200–500 words, concisely and clearly answer the following question:

In Section 6.1, the authors mention that Chord can perform lookups either in iterative or recursive style.

Assume that no packets are dropped by the Internet, so that no retransmissions of messages by hosts are required. Would you expect iterative lookups to be lower-latency than recursive ones, recursive ones to be lower-latency than iterative ones, or would you expect these two lookup styles’ latencies to be roughly equal, and why? Justify your answer by counting the number of one-way hops taken in each style of lookup, so that you can compute the relative difference in latency between the two lookup styles (e.g., “style A should take \(X\) times longer than style B”).