Prob 1 Hint.

Watch the video of today.

Let N be a finite set of sequences of "A," + symbols.

Build a de Bruijn Graph out of all the sequences in N. Then, by doing frequency counting, you make the graph as a markov chain M.

For each sequence α in N, you "walk" the sequence along the markov chain M. Suppose that on the resulting walk, the transition probabilities are $P_1, P_2, \ldots, P_k$. Then define

$$\lambda_\alpha = -\log(P_1 \cdot P_2 \cdots P_k).$$

Let $\lambda = \frac{1}{|S|} \sum\limits_{\alpha \in S} \lambda_\alpha$. Let ε be a proven

small number. Then, if α sat.

$$|\lambda_\alpha - \lambda| < \varepsilon$$

"random". This is from the typical path paper.

You tell me the details (e.g., how

to construct the M, etc.).

This λ is the average of all λ_α for $\alpha \in S$.